TECHNICAL MANUAL
RACK CONVEYOR DISHMACHINES
Admiral Series

Admiral 44-4
Admiral 66-4

Installation, Operation, and Maintenance Instructions

Insinger Machine Company
6245 State Road
Philadelphia, PA 19135-2996

800.344.4802
Fax 215.624.6966
www.insingermachine.com

Thank you for purchasing this quality Insinger product.

On the space provided below please record the model, serial number and start-up date of this unit:

Model:_____

Serial Number:_____

Start-Up Date:_____

When referring to this equipment please have this information available.

Each piece of equipment at Insinger is carefully tested before shipment for proper operation. If the need for service should arise please contact your local Authorized Insinger Service Company.

A Service Network Listing is provided on our web site, www.insingermachine.com or call Insinger at 800-344-4802 for your local authorized servicer.

For proper activation of the *Insinger Limited Warranty* a SureFire™ Start-Up & Check-Out Service should be completed on your machine. Refer to the Introduction section in this manual for an explanation of Insinger SureFire™ Start-Up & Check-Out Program.

Please read the Insinger Limited Warranty and all installation and operation instructions carefully before attempting to install or operate your new Insinger product.

To register your machine for warranty by phone, fax or the internet or for answers to question concerning installation, operation, or service contact our Technical Services Department:

TECHNICAL SERVICE CONTACTS	
Toll-Free	**800-344-4802**
Fax	**215-624-6966**
E-mail	**service@insingermachine.com**
Web	**www.insingermachine.com**

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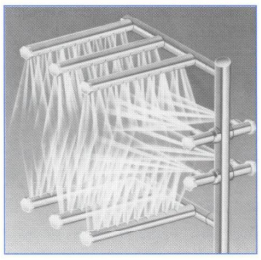
Item #_____

ADMIRAL 44-4

SINGLE TANK CONVEYOR DISHWASHER

CSI - 11400



Patented CrossFire® Wash System creates a fan shaped spray to clean ware thoroughly

DESIGN

Automatic conveyor, rack type single tank dishwasher with recirculating wash and fresh water final rinse. Capacity is 217 - 20"X20" racks per hour, or 5,425 dishes per hour with a conveyor speed of 6.0 ft. per minute. Designed for left or right hand conveyor travel, as specified.

STANDARD EQUIPMENT

- Exclusive CrossFire® Wash System (patented)
- Tank heat: 15 KW electric immersion heater or steam injector
- Capillary thermometer for wash
- In-line thermometer for final rinse
- Vacuum breaker on all incoming water lines
- Manifold cleanout brush
- Inspection door
- S/S frame, legs and feet
- Automatic tank fill
- SureFire™ Start-Up and Check-Out Service
- Low water protection
- Ventilation fan connection provision
- Single point electrical connection: motor, controls, and heaters
- Detergent connection provision
- Elevated top mounted NEMA 12 control panel
- Easily-cleaned crowned hood top
- Simplified scrap screen design
- Door safety switch
- Standard frame drip proof motors
- Energy saver
- Override switch for de-liming
- Detergent saver
- S/S splash guards
- S/S vestibules

OPTIONAL ACCESSORY EQUIPMENT

- ❑ Pressure reduction valve and line strainer
- ❑ Stainless steel steam coil tank heat
- ❑ Infrared tank heat—(50,000 BTU, natural gas or propane)
- ❑ Steam booster
- ❑ Electric booster
- ❑ Vent and adjustable damper controls
- ❑ Security package
- ❑ Totally enclosed motor
- ❑ S/S front enclosure panel
- ❑ Rack limit switch
- ❑ Chemical sanitizer injectorpackage for low temperatureoperations
- ❑ Insulated hood and door
- ❑ Power loader
- ❑ Power unloader
- ❑ Door activated drain closer
- ❑ Plastic 20" x 20" racks (plates or silver)

UL NSF

Insinger

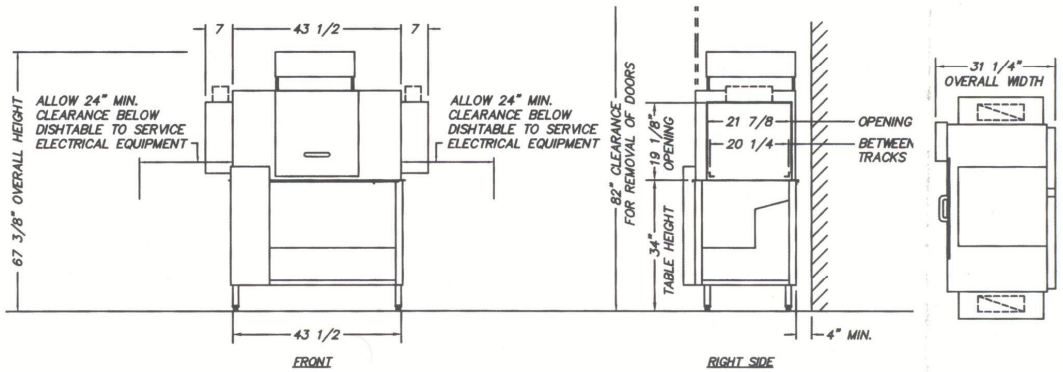
6245 State Road
Philadelphia, PA 19135-2996
215-624-4800
215-624-6966 FAX
800-344-4802
www.insingermachine.com

SUREFIRE™ START-UP & CHECK-OUT SERVICE

Insinger

ADMIRAL 44-4

CSI - 11400



Note: For all rough in connections see Installation and Layout Detail Drawing.

SPECIFICATIONS

CONSTRUCTION - Hood and tank constructed of 16 gauge type 304 S/S. Hood of all welded seamless construction. S/S frame, legs, and feet. All internal castings are non-corrosive nickel alloy, bronze or S/S.

DOOR - Extra large die formed type 304 S/S front inspection door riding in all S/S channels. No plastic or nylon sleeves or liners used. Two intermediate S/S door safety stops.

CONVEYOR - One S/S roller chain conveyor, with rack driving lugs every sixth link, running along the front of the machine. Eight free spinning rollers placed along the back wall of the machine. Conveyor accommodates all standard 20" racks. Conveyor drive system includes direct drive gear motor with frictionless, trouble-free clutch system, spring-loaded and automatically re-engaging. Racks conveyed automatically through washing and rinsing systems, powered by an independent 1/15 HP drive motor.

PUMP - Centrifugal type "packless" pump with brass petcock drain. Construction includes ceramic seal and a balanced cast impeller on a precision ground stainless steel shaft. All working parts mounted as an assembly and removable as a unit without disturbing pump housing. Two HP wash motor: standard horizontal C-face frame, drip proof, internally cooled with ball-bearing construction.

CONTROLS - Top mounted NEMA 12 control enclosure, with 3.5 inch air gap between hood and enclosure, housing motor overload protection, contactors, transformers, and all other dishwasher controls. All controls safe low voltage 24 VAC.

ENERGY SAVER - Rack actuated lever automatically operates the final rinse solenoid only when a rack passes, saving water and energy. The lever also activates an adjustable timer control. If no ware passes during the set time, the machine shuts down.

SPRAY SYSTEM - Spray arms made of type 304 stainless steel pipe. Spray assemblies removable without the use of tools.

WASH - Upper and lower manifolds with CrossFire® System (patented). One manifold above with 3 power wash arms, each with 5 high pressure cleaning slots and one manifold below with 4 power wash arms, each with 7 high pressure cleaning slots. The slots are precision milled for water control producing a fan spray. Wash arms are fillet welded to the S/S manifold. The CrossFire® System provides 2 horizontally spraying high pressure nozzles.

FINAL RINSE - Three nozzles above and four nozzles below threaded into S/S schedule 40 pipes. Nozzle assemblies produce a fan spray reducing water consumption, maximizing heat retention.

DRAIN - Drain valve externally controlled. Overflow assembly with skimmer cap is removable without use of tools for drain line inspection. Heaters protected by low water level control.

*Note—Exhaust requirements are for pant leg connections only. For hood type, CFM requirements vary, consult hood manufacturer for specific sizing.

Capacity per hour	Tank capacity	Motor size	Electric usage	Steam consumption at 20 psi min.	Gas consumption
217 racks 5,425 dishes 200-400 meals	21 gals. (wash) 37 gals. (wash-gas)	2 hp (wash) 1/15 hp (conveyor)	15 kw tank 24 kw rem booster 40° rise 36 kw rem booster 70° rise	54 lbs./hr tank 70 lbs./hr booster 40° rise 123 lbs./hr booster 70° rise	50,000 BTUH 49 CFH nat. gas 20 CFH propane

Final rinse peak flow at 20 psi min.	Final rinse consumption at 20 psi min.	*Exhaust requirements	Peak rate drain flow
3.3 gals./min.	198 gals./hr. 0.91 gals./rack	350 CFM Load 350 CFM Unload	9 gals./min.

Shipping weight	Installation distance from vertical combustible service
600 lbs.	2"

Current draw amps	Steam	Gas w/o booster	Electric w/o booster
208/3/60	8.5	9.2	50.1
240/1/60	14.3	14.3	76.7
240/3/60	7.8	8.5	43.9
380/3/50	4.7	5.1	27.5
480/3/60	3.4	4.2	21.9

3M 01/03 PRINTED IN USA

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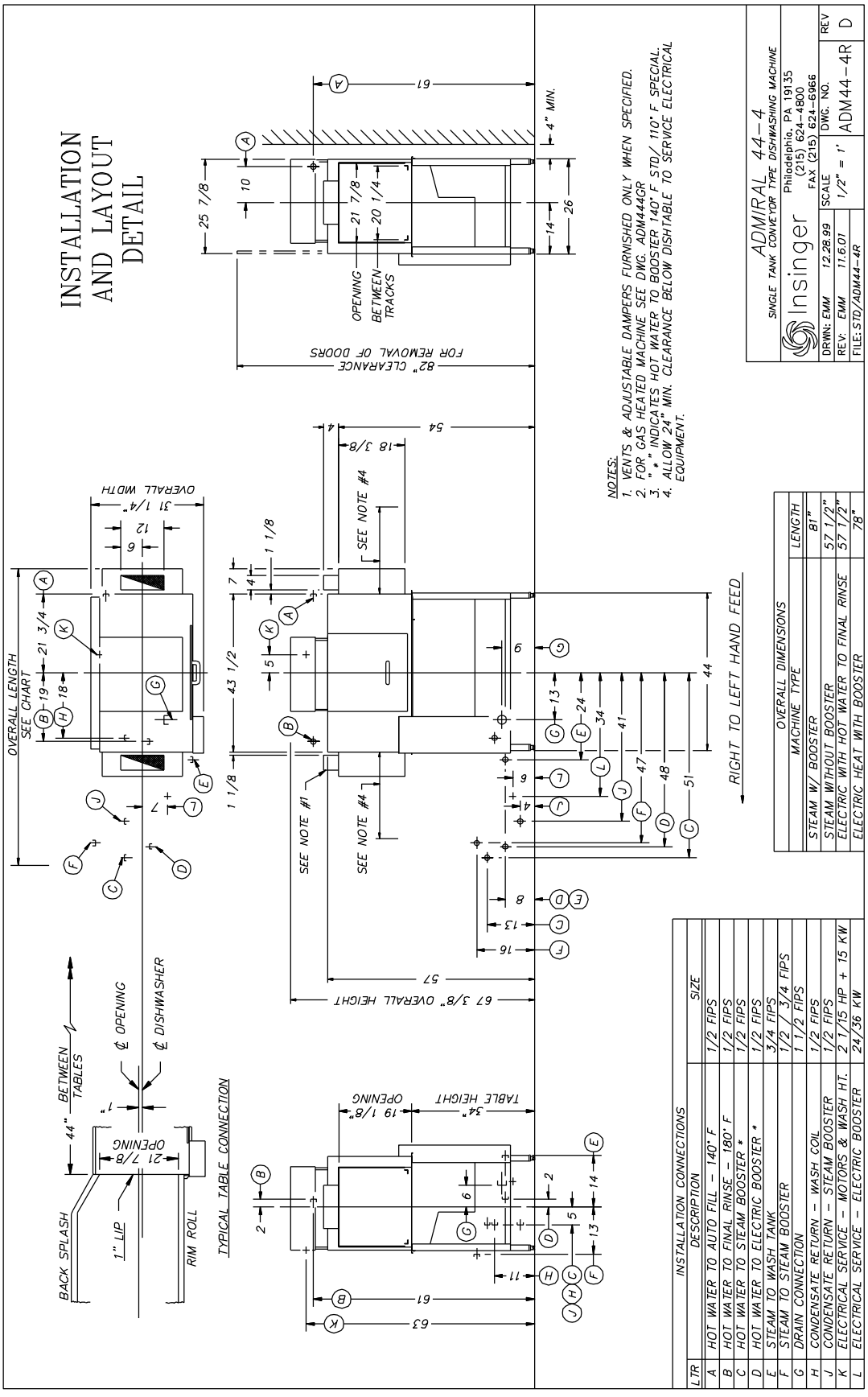
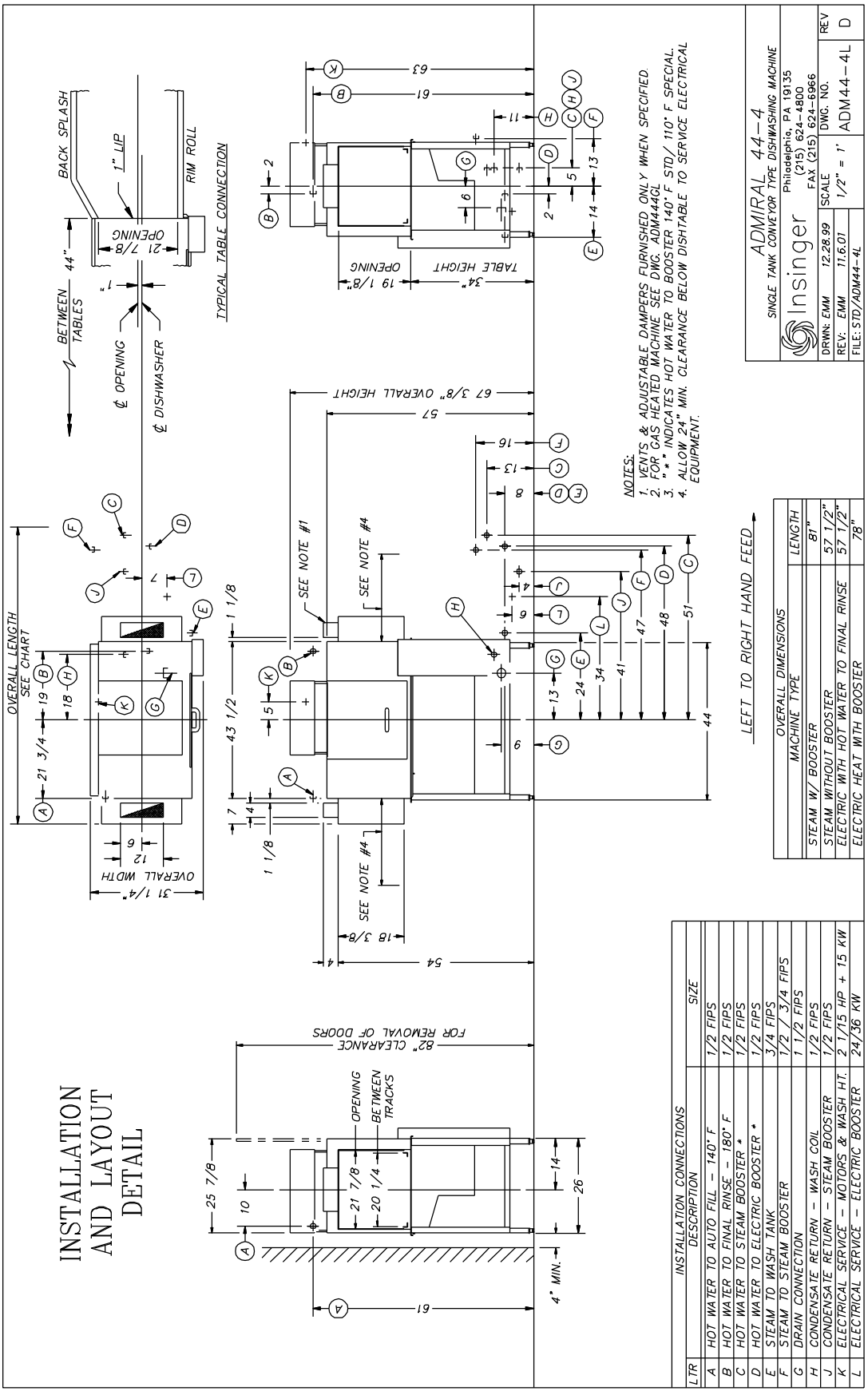

INSTALLATION AND LAYOUT DETAIL
ADMIRAL 44-4
SINGLE TANK CONVEYOR TYPE DISHWASHING MACHINE
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
DRWN: EMM 12.28.99
REV: EMM 11.6.01
FILE: STD/ADM44-4R
SCALE 1/2" = 1'
DWG. NO. ADM44-4R
REV D
NOTES:
1. VENTS & ADJUSTABLE DAMPERS FURNISHED ONLY WHEN SPECIFIED.
2. FOR GAS HEATED MACHINE SEE DWG. ADM444GR
3. "*" INDICATES HOT WATER TO BOOSTER 140° F STD./ 110° F SPECIAL.
4. ALLOW 24" MIN. CLEARANCE BELOW DISH TABLE TO SERVICE ELECTRICAL EQUIPMENT.
RIGHT TO LEFT HAND FEED
OVERALL DIMENSIONS
MACHINE TYPE | LENGTH
STEAM W/ BOOSTER | 81"
STEAM WITHOUT BOOSTER | 57 1/2"
ELECTRIC WITH HOT WATER TO FINAL RINSE | 57 1/2"
ELECTRIC HEAT WITH BOOSTER | 78"
INSTALLATION CONNECTIONS
LTR | DESCRIPTION | SIZE
A | HOT WATER TO AUTO FILL - 140° F | 1/2 FIPS
B | HOT WATER TO FINAL RINSE - 180° F | 1/2 FIPS
C | HOT WATER TO STEAM BOOSTER * | 1/2 FIPS
D | HOT WATER TO ELECTRIC BOOSTER * | 1/2 FIPS
E | STEAM TO WASH TANK | 3/4 FIPS
F | STEAM TO STEAM BOOSTER | 1/2 - 3/4 FIPS
G | DRAIN CONNECTION | 1 1/2 FIPS
H | CONDENSATE RETURN - WASH COIL | 1/2 FIPS
J | CONDENSATE RETURN - STEAM BOOSTER | 1/2 FIPS
K | ELECTRICAL SERVICE - MOTORS & WASH HT. | 2 1/15 HP + 15 KW
L | ELECTRICAL SERVICE - ELECTRIC BOOSTER | 24/36 KW
OVERALL LENGTH SEE CHART
OVERALL WIDTH
SEE NOTE #1
SEE NOTE #4
82" CLEARANCE FOR REMOVAL OF DOORS
OPENING BETWEEN TRACKS
4" MIN.
67 3/8" OVERALL HEIGHT
TABLE HEIGHT 34"
OPENING 19 1/8"
TYPICAL TABLE CONNECTION
BACK SPLASH
1" LIP
RIM ROLL
OPENING 21 7/8"
44" BETWEEN TABLES
℄ OPENING
℄ DISHWASHER


INSTALLATION AND LAYOUT DETAIL
ADMIRAL 44-4
SINGLE TANK CONVEYOR TYPE DISHWASHING MACHINE
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
DRWN: EMM 12.28.99
REV: EMM 11.6.01
FILE: STD/ADM44-4L
SCALE 1/2" = 1'
DWG. NO. ADM44-4L
REV D
NOTES:
1. VENTS & ADJUSTABLE DAMPERS FURNISHED ONLY WHEN SPECIFIED.
2. FOR GAS HEATED MACHINE SEE DWG. ADM444GL
3. "*" INDICATES HOT WATER TO BOOSTER 140° F STD./ 110° F SPECIAL.
4. ALLOW 24" MIN. CLEARANCE BELOW DISHTABLE TO SERVICE ELECTRICAL EQUIPMENT.
LEFT TO RIGHT HAND FEED
OVERALL DIMENSIONS
MACHINE TYPE | LENGTH
STEAM W/ BOOSTER | 81"
STEAM WITHOUT BOOSTER | 57 1/2"
ELECTRIC WITH HOT WATER TO FINAL RINSE | 57 1/2"
ELECTRIC HEAT WITH BOOSTER | 78"
INSTALLATION CONNECTIONS
LTR | DESCRIPTION | SIZE
A | HOT WATER TO AUTO FILL - 140° F | 1/2 FIPS
B | HOT WATER TO FINAL RINSE - 180° F | 1/2 FIPS
C | HOT WATER TO STEAM BOOSTER * | 1/2 FIPS
D | HOT WATER TO ELECTRIC BOOSTER * | 1/2 FIPS
E | STEAM TO WASH TANK | 3/4 FIPS
F | STEAM TO STEAM BOOSTER | 1/2 / 3/4 FIPS
G | DRAIN CONNECTION | 1 1/2 FIPS
H | CONDENSATE RETURN - WASH COIL | 1/2 FIPS
J | CONDENSATE RETURN - STEAM BOOSTER | 1/2 FIPS
K | ELECTRICAL SERVICE - MOTORS & WASH HT. | 2 1/15 HP + 15 KW
L | ELECTRICAL SERVICE - ELECTRIC BOOSTER | 24/36 KW
OVERALL LENGTH SEE CHART
OVERALL WIDTH
BETWEEN TABLES
44"
21 7/8" OPENING
1" LIP
BACK SPLASH
RIM ROLL
℄ OPENING
℄ DISHWASHER
TYPICAL TABLE CONNECTION
TABLE HEIGHT
34"
19 1/8" OPENING
SEE NOTE #1
SEE NOTE #4
SEE NOTE #4
SEE NOTE #4
67 3/8" OVERALL HEIGHT
82" CLEARANCE FOR REMOVAL OF DOORS
OPENING BETWEEN TRACKS
4" MIN.

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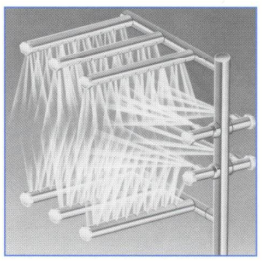
Item #_____

ADMIRAL 66-4

SINGLE TANK CONVEYOR DISHWASHER WITH RECIRCULATING PREWASH

CSI - 11400



Patented CrossFire® Wash System creates a fan shaped spray to clean ware thoroughly

DESIGN

Automatic conveyor, rack type single tank dishwasher with recirculating prewash and wash and fresh water final rinse. Capacity is 217 - 20"X20" racks per hour, or 5,425 dishes per hour with a conveyor speed of 6.0 ft. per minute. Designed for left or right hand conveyor travel, as specified.

STANDARD EQUIPMENT

- Exclusive CrossFire® Wash System (patented)
- Tank heat: 15 KW electric immersion heater or steam injector
- Capillary thermometers for prewash and wash
- In-line thermometer for final rinse
- Vacuum breaker on all incoming water lines
- S/S vestibules
- Manifold cleanout brush
- Inspection doors
- S/S frame, legs and feet
- Automatic tank fill
- Low water protection
- Single point electrical connection: motor, controls, and heater
- Detergent connection provision
- Elevated top mounted NEMA 12 control panel
- Easily-cleaned crowned hood top
- Simplified scrap screen design
- Door safety switches
- Standard frame drip proof motors
- Energy saver
- Detergent saver
- Override switch for de-liming
- SureFire™ Start-Up and Check-Out Service
- Ventilation fan connection provision

OPTIONAL ACCESSORY EQUIPMENT

- ❑ Pressure reduction valve and line strainer
- ❑ Stainless steel steam coil tank heat
- ❑ Infrared tank heat—50,000 BTU natural gas or propane
- ❑ Steam booster
- ❑ Electric booster
- ❑ Vent and adjustable damper controls
- ❑ Security package
- ❑ Totally enclosed motors
- ❑ S/S front enclosure panel
- ❑ Rack limit switch
- ❑ Chemical sanitizer injector package for low temperature operations
- ❑ Insulated hood and doors
- ❑ Power loader
- ❑ Power unloader
- ❑ Door activated drain closers
- ❑ Plastic 20"X20" racks (plate or silver)

UL NSF

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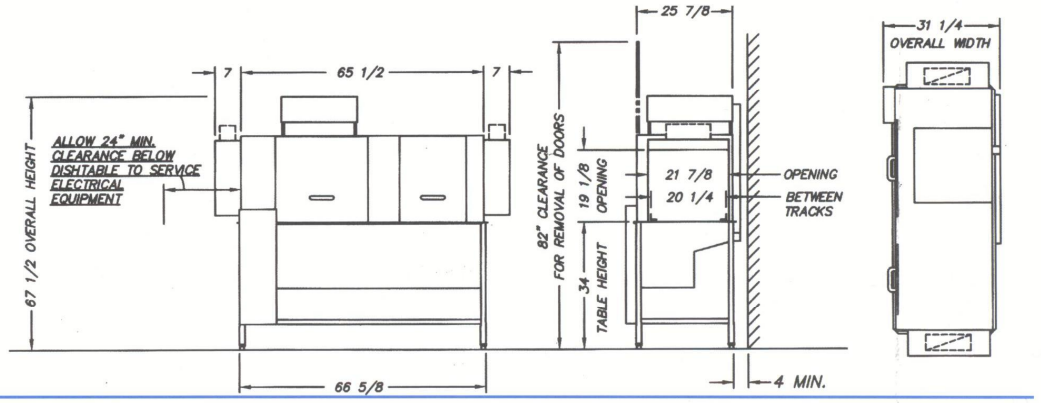
6245 State Road
Philadelphia, PA 19135-2996
215-624-4800
215-624-6966 FAX
800-344-4802
www.insingermachine.com

SUREFIRE™ START-UP & CHECK-OUT SERVICE

Insinger

ADMIRAL 66-4

CSI - 11400



Note: For all rough in connections see Installation and Layout Detail Drawing.

SPECIFICATIONS

CONSTRUCTION - Hood and tank constructed of 16 gauge type 304 S/S. Hood of all welded seamless construction. S/S frame, legs, and feet. All internal castings are non-corrosive nickel alloy, bronze or S/S.

DOORS - Two extra large die formed type 304 S/S front inspection doors riding in all S/S channels. No plastic or nylon sleeves or liners used. Two intermediate S/S door safety stops on each door.

CONVEYOR - One S/S roller chain conveyor, with rack driving lugs every sixth link, running along the front of the machine. 12 free spinning rollers placed along the back wall of the machine. Conveyor accommodates all standard 20" racks. Conveyor drive system includes direct drive gear motor with frictionless, trouble-free clutch system, spring-loaded and automatically re-engaging. Racks conveyed automatically through washing and rinsing systems, powered by an independent 1/15 HP drive motor.

PUMPS - Centrifugal type "packless" pump with brass petcock drain. Construction includes ceramic seal and a balanced cast impeller on a precision ground stainless steel shaft. All working parts mounted as an assembly and removable as a unit without disturbing pump housing. Two HP wash motor and 1/2 HP prewash motor: standard horizontal C-face frame, drip proof, internally cooled with ball-bearing construction.

CONTROLS - Top mounted NEMA 12 control enclosure, with 3.5 inch air gap between hood and enclosure, housing motor overload protection, contactors, transformers, and all other dishwasher controls. All controls safe low voltage 24 VAC.

ENERGY SAVER - Rack actuated lever automatically operates the final rinse solenoid only when a rack passes, saving water and energy. The lever also activates an adjustable timer control. If no ware passes during the set time, the machine shuts down.

SPRAY SYSTEM - Spray arms made of type 304 stainless steel pipe. Spray assemblies removable without the use of tools.

PREWASH - One manifold above and one manifold below, each with 3 high pressure cleaning nozzles.

WASH - Upper and lower manifolds with CrossFire® System (patented). One manifold above with 3 power wash arms, each with 5 high pressure cleaning slots and one manifold below with 4 power wash arms, each with 7 high pressure cleaning slots. The slots are precision milled for water control producing a fan spray. Wash arms are fillet welded to the S/S manifold. The CrossFire® System provides 4 horizontally spraying high pressure nozzles.

FINAL RINSE - Three nozzles above and four nozzles below threaded into S/S schedule 40 pipes. Nozzle assemblies produce a fan spray reducing water consumption, maximizing heat retention.

DRAINS - Drain valves externally controlled. Overflow assembly with skimmer cap is removable without use of tools for drain line inspection. Heaters protected by low water level control.

*Note—Exhaust requirements are for pant leg connections only. For hood type, CFM requirements vary, consult hood manufacturer for specific sizing.

Capacity per hour	Tank capacity	Motor size	Electric usage	Steam consumption at 20 psi min.	Gas consumption
217 racks 5,425 dishes 200-400 meals	9 gals. (prewash) 19 gals. (wash) 17 gals. (prewash-gas) 37 gals. (wash-gas)	2 hp (wash) 1/2 hp (prewash) 1/15 hp (conveyor)	15 kw tank 24 kw rem booster 40°rise 36 kw rem booster 70°rise	54 lbs./hr tank 70 lbs./hr booster 40° rise 123 lbs./hr booster 70° rise	50,000 BTUH 49 CFH nat. gas 20 CFH propane

Final rinse peak flow at 20 psi min.	Final rinse consumption at 20 psi min.	*Exhaust requirements	Peak rate drain flow
3.3 gals./min.	198 gals./hr. 0.91 gals./rack	350 CFM Load 350 CFM Unload	14 gals./min.

Shipping weight	Installation distance from vertical combustible service
800 lbs.	2"

Current draw amps	Steam	Gas w/o booster	Electric w/o booster
208/3/60	10.7	11.4	53.3
240/1/60	19.4	19.4	81.8
240/3/60	9.8	10.5	45.9
380/3/50	5.9	6.3	28.7
480/3/60	4.9	5.2	22.9

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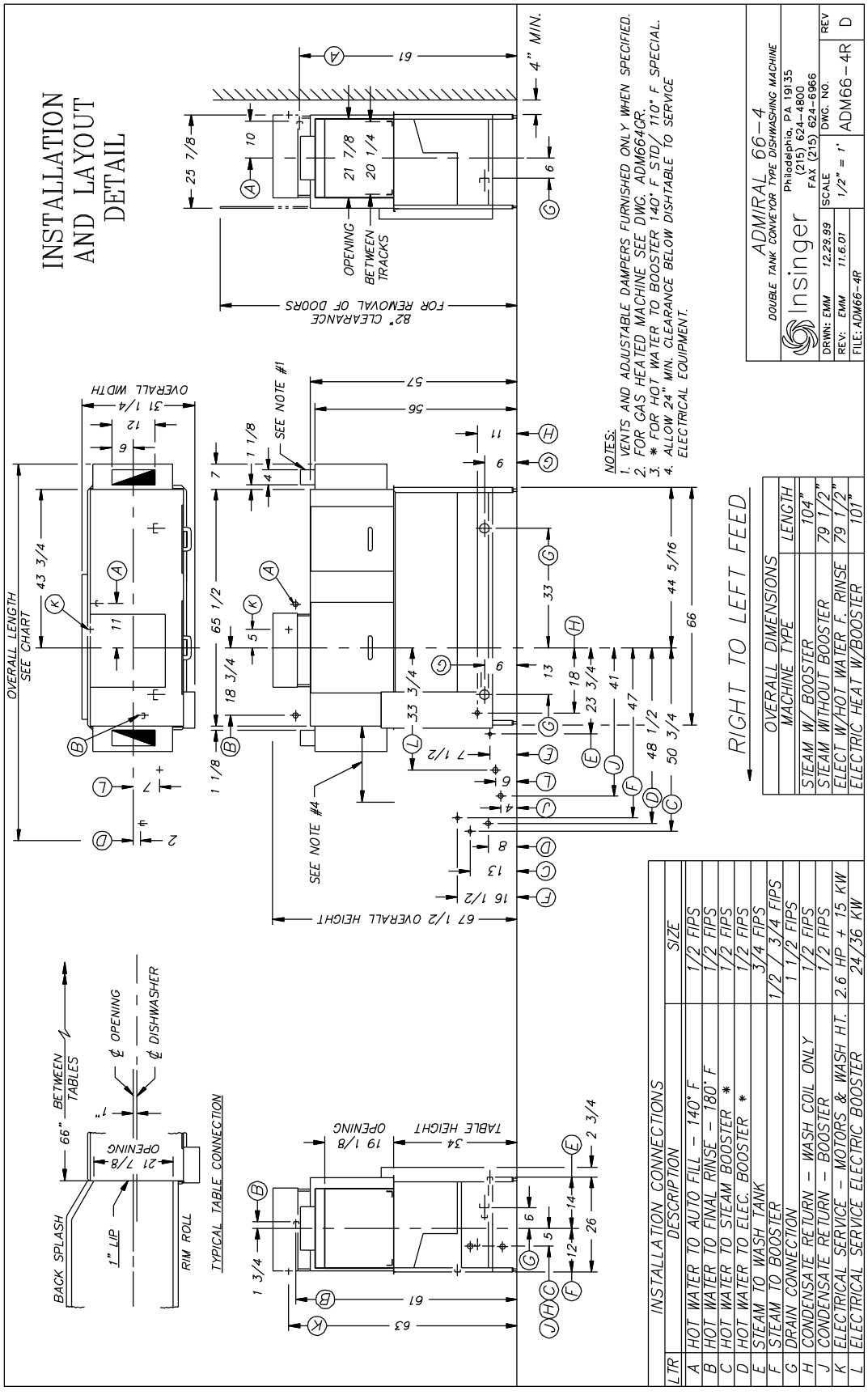
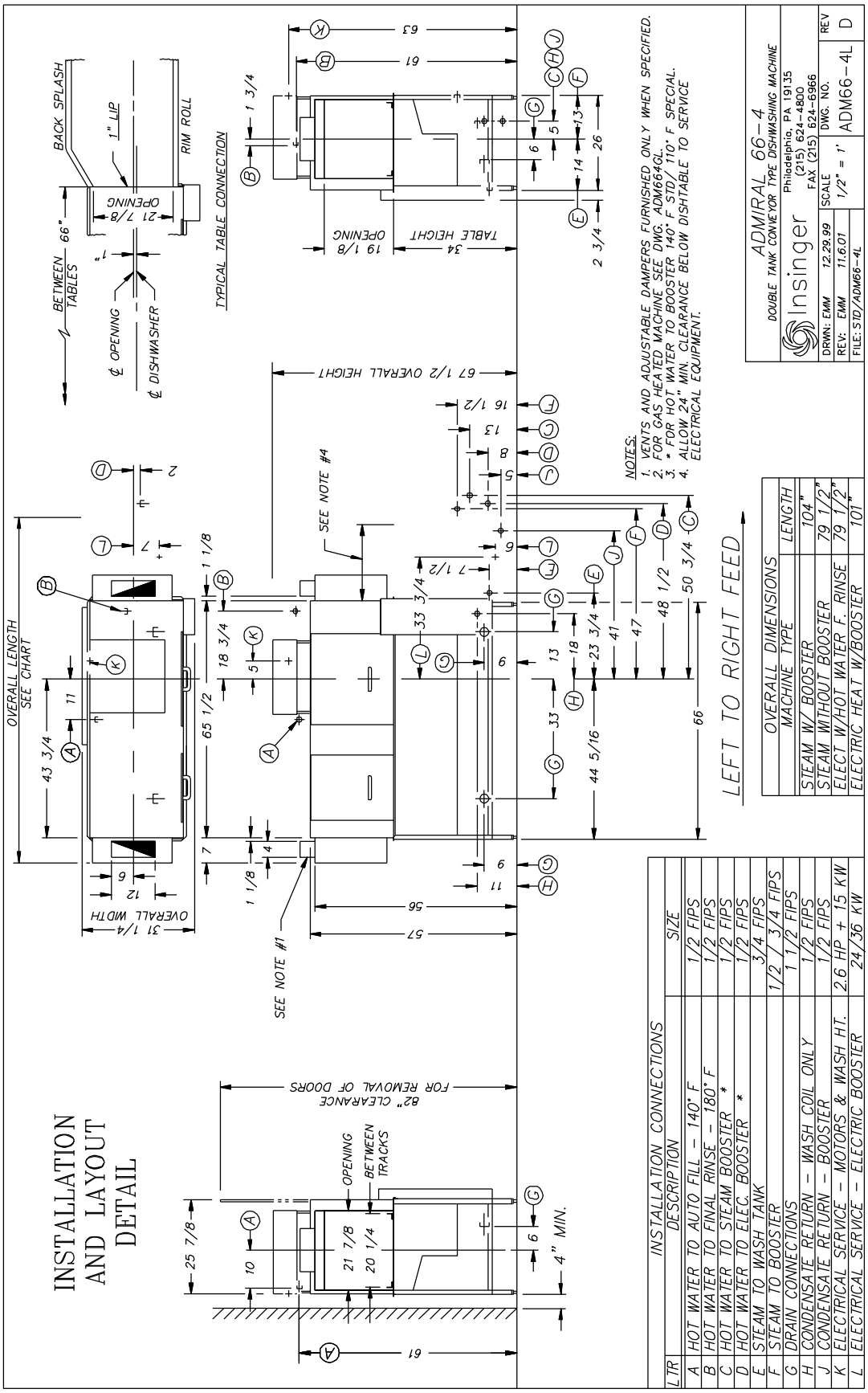

INSTALLATION AND LAYOUT DETAIL
RIGHT TO LEFT FEED
NOTES:
1. VENTS AND ADJUSTABLE DAMPERS FURNISHED ONLY WHEN SPECIFIED.
2. FOR GAS HEATED MACHINE SEE DWG. ADM664GR.
3. * FOR HOT WATER TO BOOSTER 140° F STD/ 110° F SPECIAL.
4. ALLOW 24" MIN. CLEARANCE BELOW DISHTABLE TO SERVICE ELECTRICAL EQUIPMENT.
OVERALL DIMENSIONS
MACHINE TYPE | LENGTH
STEAM W/ BOOSTER | 104"
STEAM WITHOUT BOOSTER | 79 1/2"
ELECT W/HOT WATER F. RINSE | 79 1/2"
ELECTRIC HEAT W/BOOSTER | 101"
ADMIRAL 66-4
DOUBLE TANK CONVEYOR TYPE DISHWASHING MACHINE
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
DRWN: EWM 12.29.99
REV: EWM 11.6.01
FILE: ADM66-4R
SCALE 1/2" = 1'
DWG. NO. ADM66-4R
REV D
INSTALLATION CONNECTIONS
LTR | DESCRIPTION | SIZE
A | HOT WATER TO AUTO FILL - 140° F | 1/2 FIPS
B | HOT WATER TO FINAL RINSE - 180° F | 1/2 FIPS
C | HOT WATER TO STEAM BOOSTER * | 1/2 FIPS
D | HOT WATER TO ELEC. BOOSTER * | 1/2 FIPS
E | STEAM TO WASH TANK | 3/4 FIPS
F | STEAM TO BOOSTER | 1/2 / 3/4 FIPS
G | DRAIN CONNECTION | 1 1/2 FIPS
H | CONDENSATE RETURN - WASH COIL ONLY | 1/2 FIPS
J | CONDENSATE RETURN - BOOSTER | 1/2 FIPS
K | ELECTRICAL SERVICE - MOTORS & WASH HT. | 2.6 HP + 15 KW
L | ELECTRICAL SERVICE ELECTRIC BOOSTER | 24/36 KW
OVERALL LENGTH SEE CHART
OVERALL WIDTH
67 1/2 OVERALL HEIGHT
82" CLEARANCE FOR REMOVAL OF DOORS
OPENING BETWEEN TRACKS
4" MIN.
SEE NOTE #1
SEE NOTE #4
TYPICAL TABLE CONNECTION
BACK SPLASH
1" LIP
RIM ROLL
66" BETWEEN TABLES
℄ OPENING
℄ DISHWASHER
OPENING
TABLE HEIGHT
34


INSTALLATION AND LAYOUT DETAIL
LEFT TO RIGHT FEED
ADMIRAL 66-4
DOUBLE TANK CONVEYOR TYPE DISHWASHING MACHINE
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
DRWN: EMM 12.29.99
REV: EMM 11.6.01
FILE: STD/ADM66-4L
SCALE 1/2" = 1'
DWG. NO. ADM66-4L
REV D
NOTES:
1. VENTS AND ADJUSTABLE DAMPERS FURNISHED ONLY WHEN SPECIFIED.
2. FOR GAS HEATED MACHINE SEE DWG. ADM664GL.
3. * FOR HOT WATER TO BOOSTER 140° F STD/ 110° F SPECIAL.
4. ALLOW 24" MIN. CLEARANCE BELOW DISHTABLE TO SERVICE ELECTRICAL EQUIPMENT.
OVERALL DIMENSIONS
MACHINE TYPE | LENGTH
STEAM W/ BOOSTER | 104"
STEAM WITHOUT BOOSTER | 79 1/2"
ELECT W/HOT WATER F. RINSE | 79 1/2"
ELECTRIC HEAT W/BOOSTER | 101"
INSTALLATION CONNECTIONS
LTR | DESCRIPTION | SIZE
A | HOT WATER TO AUTO FILL - 140° F | 1/2 FIPS
B | HOT WATER TO FINAL RINSE - 180° F | 1/2 FIPS
C | HOT WATER TO STEAM BOOSTER * | 1/2 FIPS
D | HOT WATER TO ELEC. BOOSTER * | 1/2 FIPS
E | STEAM TO WASH TANK | 3/4 FIPS
F | STEAM TO BOOSTER | 1/2 / 3/4 FIPS
G | DRAIN CONNECTIONS | 1 1/2 FIPS
H | CONDENSATE RETURN - WASH COIL ONLY | 1/2 FIPS
J | CONDENSATE RETURN - BOOSTER | 1/2 FIPS
K | ELECTRICAL SERVICE - MOTORS & WASH HT. | 2.6 HP + 15 KW
L | ELECTRICAL SERVICE - ELECTRIC BOOSTER | 24/36 KW
OVERALL LENGTH SEE CHART
OVERALL WIDTH
67 1/2 OVERALL HEIGHT
SEE NOTE #1
SEE NOTE #4
TYPICAL TABLE CONNECTION
TABLE HEIGHT
OPENING
BACK SPLASH
1" LIP
RIM ROLL
BETWEEN TABLES
℄ OPENING
℄ DISHWASHER
82" CLEARANCE FOR REMOVAL OF DOORS
OPENING
BETWEEN TRACKS
4" MIN.

ADMIRAL RACK CONVEYOR SERIES

INTRODUCTION

Purpose
The purpose of this technical manual is to provide installation, operation, cleaning and maintenance directions.

A section is provided for replacement parts.

Scope
This manual contains all pertinent information to assist in the proper installation, operation, cleaning, maintenance, and parts ordering for Insinger Rack Conveyor Admiral Dishwasher Series.

The **installation instructions** are intended for qualified equipment installers. The **operation and cleaning instructions** are intended for the daily users of the equipment. The **maintenance and parts sections** are intended for qualified service and/or maintenance technicians. Replacement parts may be ordered directly from our factory or from your local Insinger Authorized Service Agency. You can speak to the **Insinger Technical Services Department, 800/344-4802**, or e-mail us at **service@insingermachine.com**. When calling for warranty information or replacement parts please provide the model and serial number of your Insinger Equipment. These important numbers should be noted in this manual on the spaces provided on the opening page.

Surefire™ Start-up & Check-out Program
Insinger is proud to offer our exclusive Surefire™ Start-up & Check-out Program to our commercial customers. This service is included in the purchase price of your new Insinger dishwasher. We will provide an authorized factory service technician for the initial start-up of your new Insinger dishwasher to ensure it is running at optimum levels from the very first pass. Please call the factory or your local Insinger Sales Representative to schedule this service.

NSF 3-2003 requirements for detergent and chemical sanitizer dispensers.

This machine must be operated with an automatic detergent dispenser and, if applicable, an automatic chemical sanitizer feeder, including a visual means to verify that detergents and sanitizers are delivered or a visual or audible alarm to signal if detergents and sanitizers are not available for delivery to the respective washing and sanitizing systems. Please see instructions for electrical and plumbing connections located in this manual and in the feeder equipment manual.

Definitions
Throughout this guide you will find the following terms: WARNING, CAUTION, & NOTE.

WARNING indicates potential physical danger.
CAUTION indicates potential equipment damage.
NOTE indicates helpful operating hints or tips.

You will visually be able to identify each as shown below:

WARNING:
Indicates potential physical danger.

NOTE:
Indicates helpful operating hints or tips.

CAUTION:
Indicates potential equipment damage.

INSINGER MACHINE COMPANY LIMITED WARRANTY

Insinger Machine Company, Inc. (Insinger) hereby warrants to the original retail purchaser of this Insinger Machine Company, Inc. product, that if it is assembled and operated in accordance with the printed instructions accompanying it, then for a period of either 15 months from the date of shipment from Insinger or 1 year (12 months) from the date of installation, that said Insinger product shall be free from defects in material and workmanship. Whichever one of the two aforestated limited warranty time periods is the longest shall be the applicable limited warranty coverage time period.

Insinger may require reasonable proof of your date of purchase; therefore, you should retain your copy of invoice or shipping document.

This limited warranty shall be limited to the repair or replacement of parts which prove defective under normal use and service and which on examination shall indicate, to Insinger's satisfaction, they are defective. Any part that is claimed to be defective and covered by this limited warranty must be returned to Insinger, this may be done through an Authorized Service Agency. Furnish serial number of machine with shipment and send to:

Insinger Machine Company
6245 State Road
Philadelphia, PA 19135-2996

If Insinger's inspection confirms the defect and the claim, Insinger will repair or replace such part without charge and return it to you freight or postage prepaid.

This limited warranty does not cover any failure or accident, abuse, misuse, alteration, misapplication, improper installation, fire, flood, acts of God or improper maintenance or service, or failure to perform normal and routine maintenance as set out in the instruction booklet (operating instructions) or for improper operation or failure to follow normal operating instructions (as set out in the instruction booklet). Insinger is not responsible nor liable for any conditions of erosion or corrosion caused by corrosive detergents, acids, lye or other chemicals used in the washing and or cleaning process.

Service must be done by either Insinger Appointed Service Agencies or agencies receiving prior authorization from Insinger.

All warranty work must be done during normal working hours, unless purchaser receives prior authorization from Insinger.

There are no other express warrants except as set forth herein and any applicable implied warranties of merchantability and fitness are limited in duration to the period of coverage of this express written limited warranty. This limited warranty supersedes all other express warranties, implied warranties of merchant-ability and fitness or limited warranties as of this date, January 1, 1998. Some states do not allow limitation on how long an implied warranty lasts so this limitation may not apply to you.

Insinger is not liable for any special, indirect or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation nor exclusion may not apply to you.

Insinger does not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return or replacement of its equipment: and no such representations are binding on Insinger.

INSINGER MACHINE COMPANY LIMITED WARRANTY
COMMERCIAL MARINE USE

Insinger Machine Company, Inc. (Insinger) hereby warrants to the original retail purchaser of this Insinger Machine Company, Inc. product, that if it is assembled and operated in accordance with the printed instructions accompanying it (installation manual), then for a period of 18 months from the date of installation on board the vessel, that said Insinger product shall be free from defects in material and workmanship.

Insinger may require reasonable proof of your date of equipment install, therefore, you should retain your copy of invoice or shipping document.

This limited warranty shall be limited to the replacement of parts which prove defective under normal use and service and which on examination shall indicate, to Insinger's satisfaction, they are defective. Any part that is claimed to be defective and covered by this limited warranty must be returned to Insinger. Furnish serial number of machine with shipment and send to:

Insinger Machine Company, Inc.
6245 State Road
Philadelphia, PA 19135-2996

If Insinger's inspection confirms the defect and the claim, Insinger will repair or replace such part without charge and return it to you freight or postage prepaid. If part damages are not covered, Insinger will contact the customer and advise.

If a factory trained authorized technician is required to repair or replace defective parts or material during the 18 month warranty period, the cruise line will be responsible for the payment of travel expense and a minimum of four hours labor.

Labor will be billed to the customer at a reduced rate of $40.00 per hour. If sailing with a vessel is required, then an eight hour per day minimum will apply.

This limited warranty does not cover accident, abuse, misuse, alteration, misapplication, improper installation, fire, flood, or improper maintenance or service, or failure to perform normal and routine maintenance as set out in the instruction booklet (operating instructions) or for improper operation or failure to follow normal operating instructions (as set out in the instruction booklet).

Insinger is not responsible nor liable for any conditions of erosion or corrosion caused by corrosive detergents, acids, lye or other chemicals used in the washing, caring and or cleaning process.

Warranty service must be done by either Insinger Appointed Service Agencies or agencies, customers galley engineers receiving prior authorization from Insinger.

There are no other express warrants except as set forth herein and any applicable implied warranties of merchantability and fitness are limited in duration to the period of coverage of this express written limited warranty. This limited warranty supersedes all other express warranties, implied warranties of merchantability and fitness or limited warranties as the above date.

Insinger does not authorize any person or company locally or overseas to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return or replacement of its equipment; and no such representations are binding on Insinger.

INSTALLATION INSTRUCTIONS

Placement

Carefully uncrate machine. Take caution not to damage components which may be mounted on the top or sides of the machine. Set unit in place and adjust the feet to level the machine.

Fasten the tables to the load and unload side of the machine. Most installations require fastening the turn-down lip of the dish table to the side of the machine with flathead counter-sunk screws. The table design should provide horizontal clearance of 30” for servicing underneath the table.

Electrical Connections

Connect electrical lines sized for the correct voltage, current and phase of the machine. These should agree with the machine requirements indicated on the nameplate and labels on the control panel.

On machines not provided with a single-point connection (optional) there is an electrical connection required for the: **1.** Pumps and control circuit, **2.** Wash tank heater(s) and, **3.** Rinse tank heaters (if provided).

If an electric booster is provided, connect power directly to the booster.

Fusing must be in accordance with the Fuse Sizing Chart below.

CAUTION:

Connections must be made to a circuit breaker or fused disconnect as provided by the end-user and required by local codes.

A laminated wiring diagram is inside the control panel.

FUSE SIZING CHART

Model	208VAC/3È	230VAC/3È	380VAC/3È	460VAC/3È	220VAC/IÈ
Admiral 44-4 Steam or Electric	15A	10A	10A	6A	20A
Admiral 44-4 Steam or Electric Power Loader	15A	15A	10A	6A	25A
Admiral 44-4 Steam or Electric Power Unloader	15A	15A	10A	10A	25A
Admiral 44-4 Steam or Electric Power Loader Power Unloader	20A	15A	10A	10A	25A
Admiral 44-4 Gas Heat	15A	15A	10A	6A	20A
Admiral 44-4 Gas Heat Power Loader Power Unloader	15A	15A	10A	10A	25A
Admiral 44-4 Admiral 66-4 Electric Heat Single-Point Electric	60A	50A	30A	25A	n/a
Admiral 44-4 Electric Heat Single-Point Electric Power Unloader	60A	50A	30A	25A	n/a

FUSE SIZING CHART					
Model	208VAC/3È	230VAC/3È	380VAC/3È	460VAC/3È	220VAC/IÈ
Admiral 44-4 electric heat single-point electric power unloader	60A	50A	35A	25A	n/a
Admiral 44-4 electric heat single-point electric power loader power unloader	60A	50A	35A	25A	n/a
Admiral 66-4 steam or electric	15A	15A	10A	6A	25A
Admiral 66-4 steam or electric power loader	15A	15A	10A	10A	35A
Admiral 66-4 steam or electric power unloader	20A	15A	10A	10A	30A
Admiral 66-4 steam or electric power loader power unloader	20A	20A	10A	10A	30A
Admiral 66-4 gas heat	15A	15A	10A	10A	25A
Admiral 66-4 gas heat power loader or unloader	20A	15A	10A	10A	30A
Admiral 66-4 gas heat power loader and unloader	20A	15A	10A	10A	35A
Admiral 66-4 electric heat single-point electric power loader or unloader	60A	50A	35A	25A	n/a
Admiral 66-4 electric heat single-point electric power loader and unloader	60A	60A	35A	30A	n/a
Admiral 44-4[1] Admiral 66-4[1] electric heat non-SPC	60A	45A	30A	25A	80A

[1] This circuit is required for all machines with electric tank heat that are not configured for single point connection.

CAUTION:

As with any 3 phase system, an electrician must check all motors for proper phasing, i.e., pump motors must be running in direction indicated by arrow on housing.

Mechanical Connections

Connect water lines for tank fills as tagged and noted on the installation drawings.

If machine is provided with steam heat connect the steam lines and steam condensate lines as tagged and noted on installation drawings. If machine is provided with gas heat, connect the gas line.

If a booster is provided a hot water connection is necessary (110º F or 140º F).

CAUTION:

Drain lines must be as specified on installation drawings.

Drain line should be properly vented and should have fall of not less than 1/4" to the foot of proper flow. Some area plumbing codes require drains to flow into an open gap with an opening twice the diameter of the pipe.

Check with your local plumbing codes for the type of drain connection required.

CAUTION:

All lines must be flushed prior to use to remove debris.

CAUTION:

Do not reduce the size of lines as specified in installation drawings. All lines are sized to facilitate necessary flows, pressures, etc.

HVAC

The ventilation system should be sized to provide adequate ventilation per machine specs. Refer to spec sheet.

Stainless steel, watertight ducting should be connected to the vent cowls (optional) on each end of the machine.

Chemicals

Upon the completed installation of the dishwasher, contact a local detergent/chemical supplier for the correct chemicals for your soil load and geographical area.

Electrical connection points for the detergent dispenser and rinse injector are located inside the control panel. Refer to the wiring diagram for this machine for the proper connection points.

Dispensers may be connected on either the primary voltage side of the machine or the 24VAC control voltage side.

CAUTION:

When connecting on the 24VAC control voltage side of the transformer, total VA *must* not exceed 5Kva.

The detergent density probe can be placed in the provided hole (labeled "Detergent Probe") in the wash tank.

Tabling

Load and unload tables should be pitched towards the machine to return excess water into the machine.

CAUTION:

Machines with unload tables less than 48" should utilize a rack limit switch to shut the machine down if clean racks pile-up. This extends the life of the drive system.

Initial Start-Up Adjustments

Tank Overfill Adjustment

1. Locate tank overfill timer in the control panel. See the control panel layout drawing located in Section 6, Electrical Schematic and Replacement Parts.
2. The overfill timer starts timing when the upper level float is actuated. Adjust the overfill timer potentiometer to turn the tank fill solenoid off when the water level is 1/4” below the lip of the overflow tube.
3. The timer has a built in dwell timing delay of 5 seconds (nominal to dampen float bounce caused by tank water motion.

Conveyor Jam Adjustment

1. Remove the mechanism guard to gain access to the conveyor drive.
2. Locate the compression spring (refer to Drawing #1397-1, Drive Mechanism Assembly).
3. The factory set compression dimension is a nominal 3 13/16”. Installations washing heavier ware may need to adjust this for more compression to keep the machine from shutting down prematurely.
4. Should the drive mechanism switch be activated by a conveyor jam, the Check Conveyor Light on the control panel will illuminate and the machine will shut down.
5. To restart the machine, clear the jam and press the green Start Button.

Final Rinse Pressure Adjustment

1. The final rinse pressure must be adjusted to 20PSI. This is done by adjusting the pressure regulator.

Insinger dishmachines are user-friendly, making them the easiest dishmachines on the market to operate and maintain.

By following these operating procedures your Insinger dishwasher will give you years of trouble free service.

OPERATION INSTRUCTIONS

1. Ensure drain overflow tube is in place. Close all tank drain valves. One drain is provided for each tank of the dishmachine.
2. Check for proper installation and cleanliness of all internal, removable components such as suction strainers, scrap screens, and spray manifolds.
3. Ensure all water, steam, and gas lines are open. Ensure electrical circuits are on.
4. Close machine doors.

NOTE:
An interlock is provided to shut the machine down if the doors are open, therefore the machine will not run if the doors are opened.

5. Move the power toggle switch to the ON position.
6. The machine will begin to fill.
7. When the tanks are full the tank heat will operate automatically.

CAUTION:

To ensure proper operation
of the auto tank fill feature and the tank heaters,
the tank level floats MUST be cleaned daily.

8. Depress the GREEN button to start the conveyor.
9. The system is now ready for operation. All ware should be properly scrapped. Do not overload racks.

CAUTION:

Overloading racks will impede proper cleaning of the ware and also put extra strain on the conveyor system.

10. Slide the rack into the dishmachine, the conveyor
11. will pass the rack through the various machine cycles. Upon entering the final rinse section of the machine the rack will engage the final rinse actuator allowing the water to sanitize the dishes.
12. Should a conveyor jam occur, the CHECK CONVEYOR light will illuminate and the machine will shutdown. To re-start the machine, clear the conveyor jam and press the GREEN START button. If the CHECK CONVEYOR light comes back on, contact a qualified service technician.
13. Upon completion of ware cleaning depress the RED button to stop the conveyor system.
14. Move the POWER toggle switch to the OFF position.
15. Refer to the cleaning procedures for proper cleaning of the dishmachine.
16. Report any unusual occurrences to qualified service personnel.

The following cleaning procedures should be done daily, at the end of the shift.

DAILY CLEANING PROCEDURES

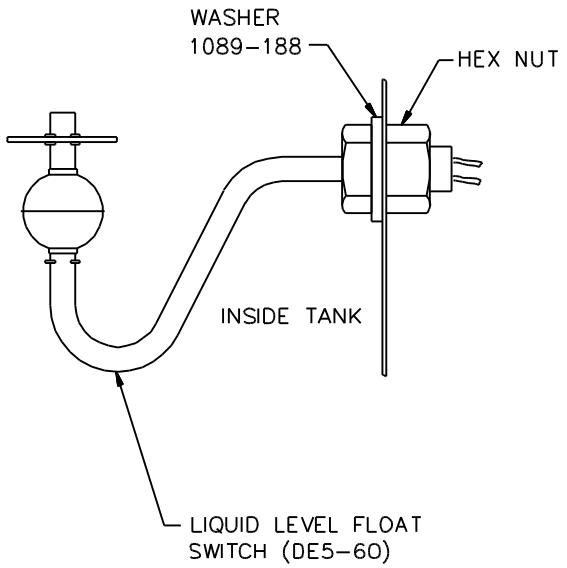
1. Remove all internal removable parts including spray manifolds, scrap screens, drain overflow tubes, suction strainers and curtains.
2. Remove the end caps from the spray manifolds and clean with the brush provided. Flush the manifolds.
3. Flush scrap screens.
4. Clean drain overflow tube.

> **NOTE:**
> V-cup seal on the drain overflow tube may become gummed not allowing the overflow tube to seal. This will cause the drain to leak water. Remove any build-up on the V-cup seal. When the seal becomes worn, replace with part # D2-557.

5. Clean the suction strainers of build-up.

> **NOTE:**
> Improper cleaning of the suction strainers will cause the pumps to cavitate. This will cause poor washing results.

6. Clean the tank level float with a plastic abrasive pad (do not use steel wool).



> **NOTE:**
> Level floats must be cleaned daily. Build-up of grease and dirt will cause faulty operation of the tank fill heating system.

The LIQUID LEVEL FLOAT is located below the scrap screens in those tanks which contain water heating devices (coils, steam injectors, or electric immersion heaters) and pump inlet strainers. They are usually located, in rackless and rack conveyor style machines, on the inside tank wall, at approximately water level, opposite and parallel to the inspection doors. In the door, stationary rack type machines, the LIQUID LEVEL FLOAT may be found beneath the scrap screen.

7. Clean curtains. When the curtains are beyond cleaning or torn they should be replaced.
8. Clean final rinse nozzles of matter clogging the jet spray.
9. Leave the doors open to allow the drying of the interior surfaces.

WEEKLY CLEANING PROCEDURES

An ENERGY SAVER SWITCH is provided on the control panel. When running the machine with de-liming solution, place this switch in the OFF position to allow the machine to run continuously. When not de-liming, the switch should be in NORMAL. Consult your detergent supplier for de-liming solution concentration and frequency of use.

The following is a basic guide for the repair and replacement of common dishwasher parts. Refer to the Basic Services Guide for troubleshooting tips.

MAINTENANCE REQUIREMENTS

Daily

1. Refer to the operations and cleaning instructions provided in this manual for daily cleaning procedures.

Weekly

1. The entire machine should be wiped down using an industrial grade stainless steel cleaner.
2. Under the supervision of your detergent supplier the machine interior must be properly de-limed.
3. A switch is provided on the control panel to run the machine continuously. For de-liming, move the selector switch to the DE-LIME position, then operate the machine normally. When de-liming is completed, return the selector switch to “normal”.

> **NOTE:**
> The water quality in some areas requires de-liming to be done more frequently. Contact your detergent supplier for recommended de-liming frequency.

Quarterly

1. Remove and clean the strainer screens on the water and steam lines. If the screens cannot be cleaned, replace.
2. Inspect the condition of the solenoid valve seats, and diaphragms. Replace where necessary.
3. Inspect drain O-Rings for leakage. Replace where necessary.
4. Grease the drive chain and sprockets.
5. Adjust conveyor chain tension using adjustment bolts located on the exit ends of the machine.

MAINTENANCE PROCEDURES

Solenoid Valve Disassembly

1. Disconnect the power supply to the machine. Turn off the water supply.
2. Remove cap on top of the coil. Remove the coil.
3. Remove the 4 hex bolts and lift bonnet from valve body. Note positioning of spring and plunger.
4. Remove main piston.
5. Inspect for dirt, wear or lime build-up. Clean or replace as required.
6. Reassemble in reverse of disassembly.

Liner Strainer Disassembly

1. Shut off water or steam supply.
2. Remove large hex nut on bottom of strainer body.
3. Remove strainer screen. Inspect and clean or replace as necessary.
4. Reassemble in reverse of disassembly. Water flow must be same direction as arrow on line strainer body. Use new gaskets to insure a tight seal.

Pump Disassembly

1. Before disassembling pump ensure there are no obstructions in the pump intake. Remove and clean the suction strainer (inside tank). See dwg. SK-2456A

> **NOTE:**
> It is not necessary to remove the pump housing from the machine to disassemble pump.

2. Remove the pump motor and impeller by removing the 4 hex bolts attaching them to the pump housing.
3. Repair or replace the pump parts as required.
4. Reassemble in reverse of disassembly.

MAINTENANCE PROCEDURES

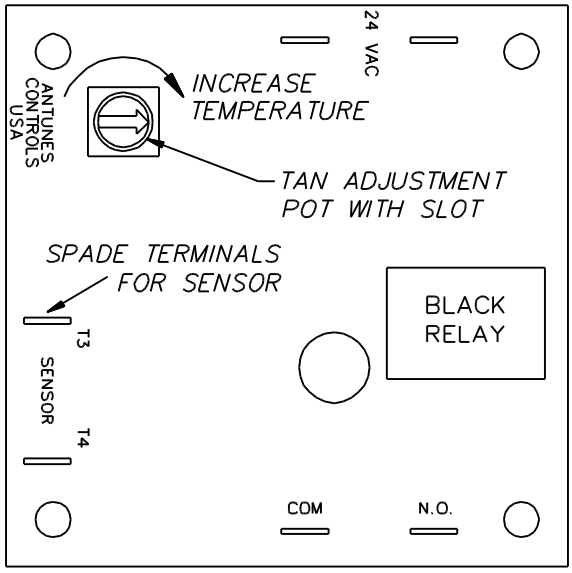
Immersion Heater Replacement

1. The immersion heater MUST be completely submerged at all times. If this is not the case contact a qualified service technician. The heated surface should never be in contact with sludge. See dwg. SK-4703.
2. Remove the housing covering the wiring terminations. Disconnect the immersion heater wires.
3. Remove the immersion heater by loosening and removing the large hex nut.
4. Install in reverse of removal.

> **NOTE:**
> Use plumbers putty as gasketing around the immersion heater to minimize leaks.

Tank Heat Temperature Adjustment

1. A temperature control board is provided in the control panel for easy adjustment of tank temperature. Though tank temperature is adjusted during the machines factory test it is sometimes necessary to re-adjust the temperature at start-up.
2. Locate the temperature control board (P/N DE9-96). Use the control panel layout drawing located in Section 4, Electrical Schematic and Replacement Parts.
3. Adjust the tank temperature to the desired temperature by turning the potentiometer located on the temperature control board. An arrow on the potentiometer indicates increase.
4. If the temperature does not change refer to Troubleshooting Tank Temperatures in the section below.



TANK TEMPERATURE CONTROL BOARD

(DE9–251)

Troubleshooting Tank Temperatures

Electric Heat

1. If temperature does not change check the temperature control board (P/N DE9-251) proper operation. If the temperature control board is faulty, replace.
2. Verify tank heat contactor is working correctly. If not, replace.
3. Verify all immersion heaters are working properly and not limed. If not, replace.

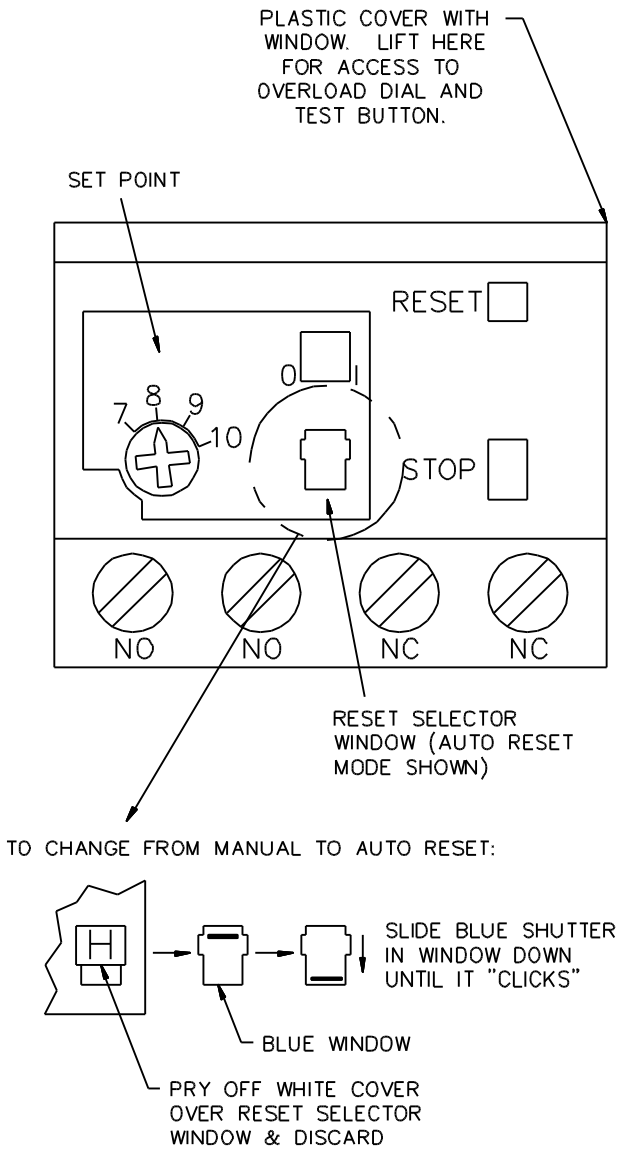
Steam Heat

1. If temperature does not change check the temperature control board (P/N DE9-251) proper operation. If the temperature control board is faulty, replace.
2. Verify steam pressure per machine specifications.
3. Verify steam trap is not clogged. If so, replace.

Motor Overloads

All motors used on Insinger Machines are provided with motor overloads. Motor overloads are adjusted when the machines are factory tested. Should it be necessary to adjust the motor overloads in the field first verify the motor current draw for the voltage the machine is using.

Using the Control Panel Component Layout Dwg. located in Section 3 to identify the overload adjust by turning the dial to the appropriate AMP draw.



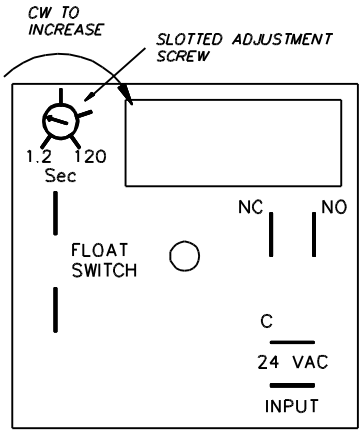
SKETCHA\SK-3829 OVERLOAD RELAY

Level System

The level control system consists of one overfill timer (P/N DE7-35) and one level float (P/N DEF-60) per tank.

When the system is powered-up, the tank(s) will begin to fill (assuming no water is in the tanks).

When the level float is actuated, the overfill timer begins to time-out and continues the filling process until the tank(s) is full.



Liquid Level Timer DE7-35
Sk-4698

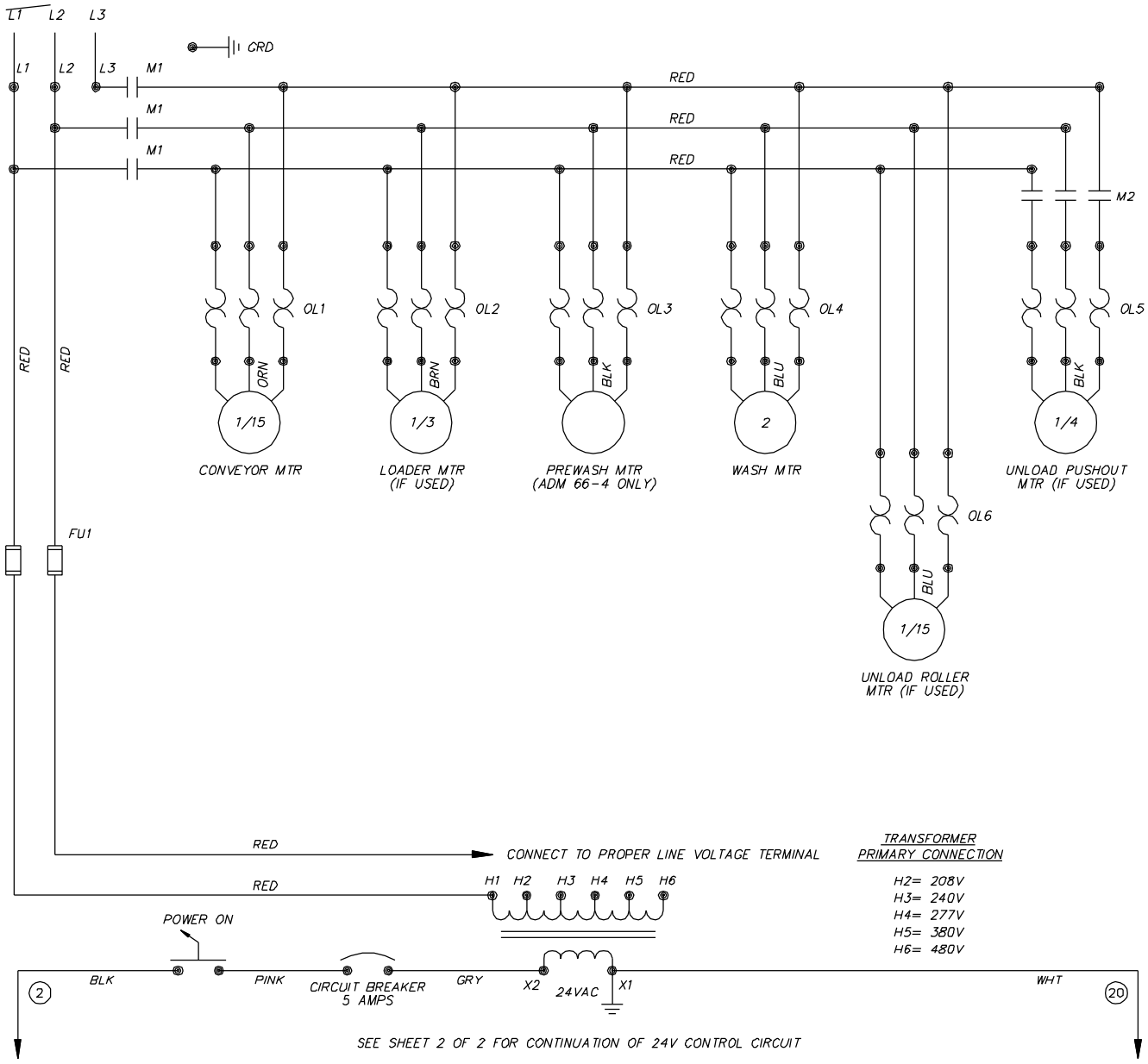
Final Rinse Actuator

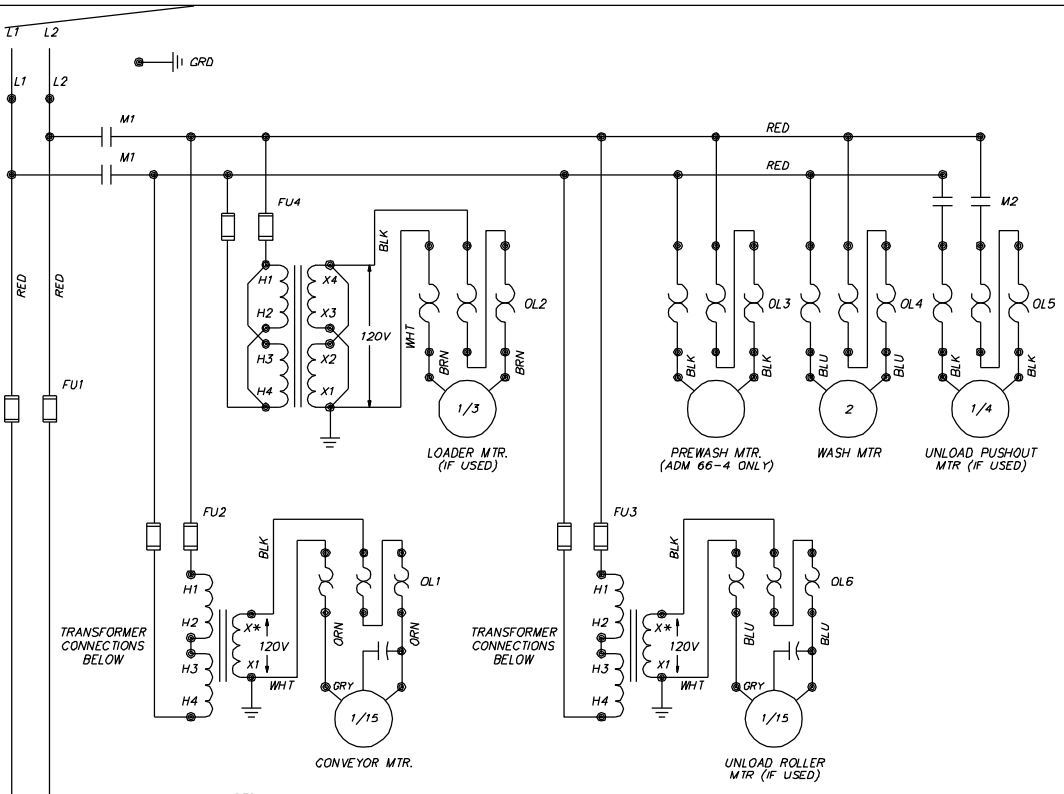
The final rinse is actuated by a level located on the rear wall of the dishwasher near the exit end. When a rack depresses it a switch is closed and a solenoid energized.

The activation of the lever also resets the Energy Saver Timer (P/N DE7-28). The timer will then start counting from 0. The timer is adjustable between 0 and 300 seconds (5 minutes). See dwg. 116-145.

NOTE:
The overfill timer MUST be adjusted during initial start-up. Adjustment depends on water fill pressure. The water level MUST be 1/4" below the lip of the overflow tube. Adjust by increasing or decreasing the potentiometer on the level timer.

NOTE:
Dirty level floats will cause the tank heat to energize with no water in the tanks.
LEVEL FLOATS MUST BE CLEANED DAILY.


L1 L2 L3
GRD
M1
M2
RED
OL1
OL2
OL3
OL4
OL5
OL6
ORN
BRN
BLK
BLU
1/15
1/3
2
1/4
CONVEYOR MTR
LOADER MTR
(IF USED)
PREWASH MTR
(ADM 66-4 ONLY)
WASH MTR
UNLOAD PUSHOUT
MTR (IF USED)
UNLOAD ROLLER
MTR (IF USED)
FU1
CONNECT TO PROPER LINE VOLTAGE TERMINAL
H1 H2 H3 H4 H5 H6
TRANSFORMER
PRIMARY CONNECTION
H2= 208V
H3= 240V
H4= 277V
H5= 380V
H6= 480V
POWER ON
BLK
PINK
CIRCUIT BREAKER
5 AMPS
GRY
X2
24VAC
X1
WHT
2
20
SEE SHEET 2 OF 2 FOR CONTINUATION OF 24V CONTROL CIRCUIT



CONVEYOR MOTOR TRANSFORMER CONNECTIONS				
	208 VAC	230 VAC	380 VAC	460 VAC
L1 TO	H1	H1 & H3	H1	H1
L2 TO	H2	H2 & H4	H4	H4
	–	–	–	H2 TO H3
X*	X3	X2	X3	X2

UNLOADER MOTOR TRANSFORMER CONNECTIONS				
	208 VAC	230 VAC	380 VAC	460 VAC
L1 TO	H1 & H3	H1 & H3	H1	H1
L2 TO	H2 & H4	H2 & H4	H4	H4
	–	–	–	H2 TO H3
X*	X4	X4	X4	X4
	X1 TO X3	X1 TO X3	–	X1 TO X3
	X2 TO X4	X2 TO X4	–	X2 TO X4

SINGLE PHASE WIRING ONLY

REV	ECN NO	DATE
P	1752	4.11.00
N	1701	8.12.99

FILE: WIRE\WADM010

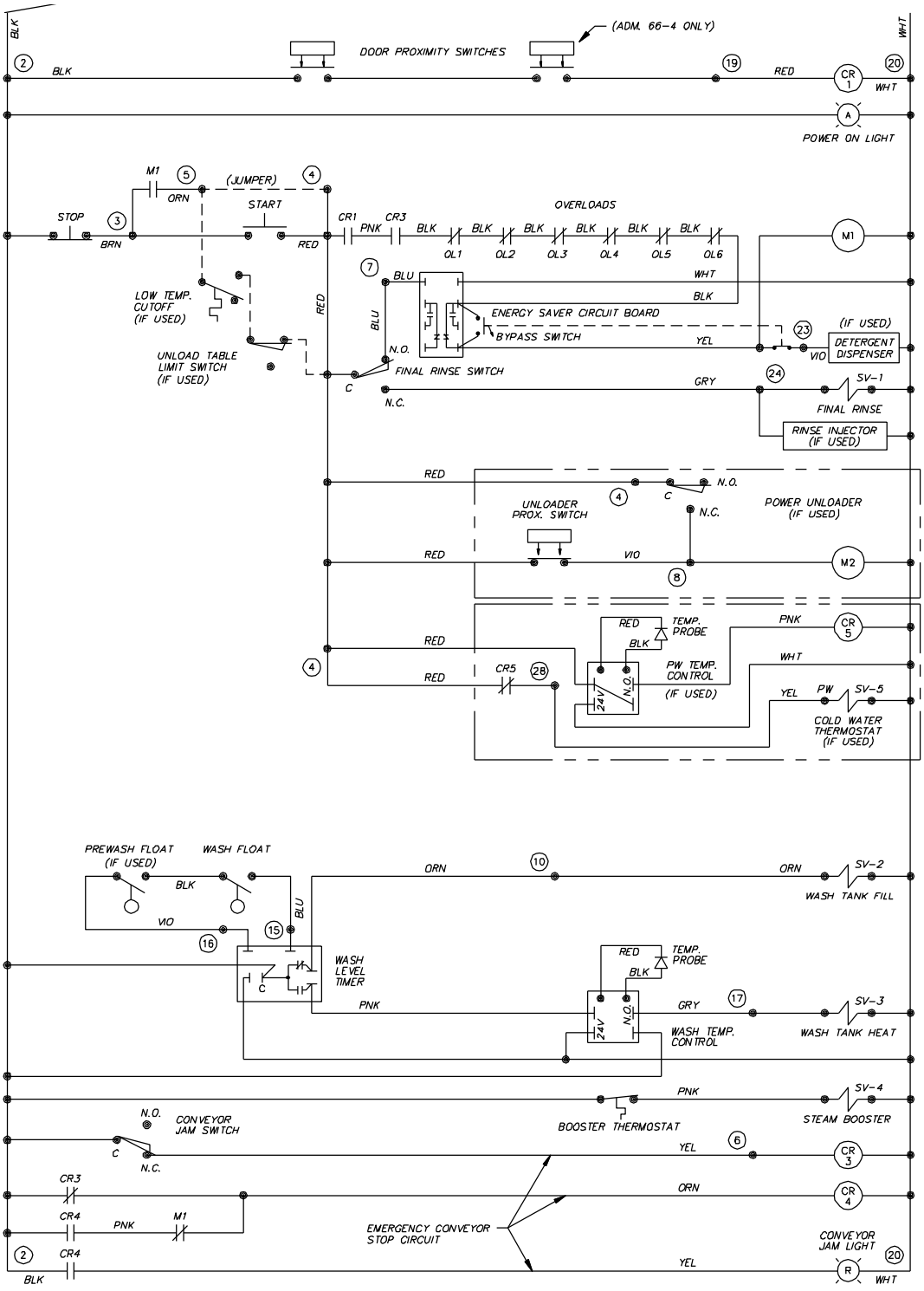
TITLE: ADMIRAL 44-4, ADMIRAL 66-4
STEAM HEAT, SINGLE PHASE

DWG. NO. WADM010

Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966

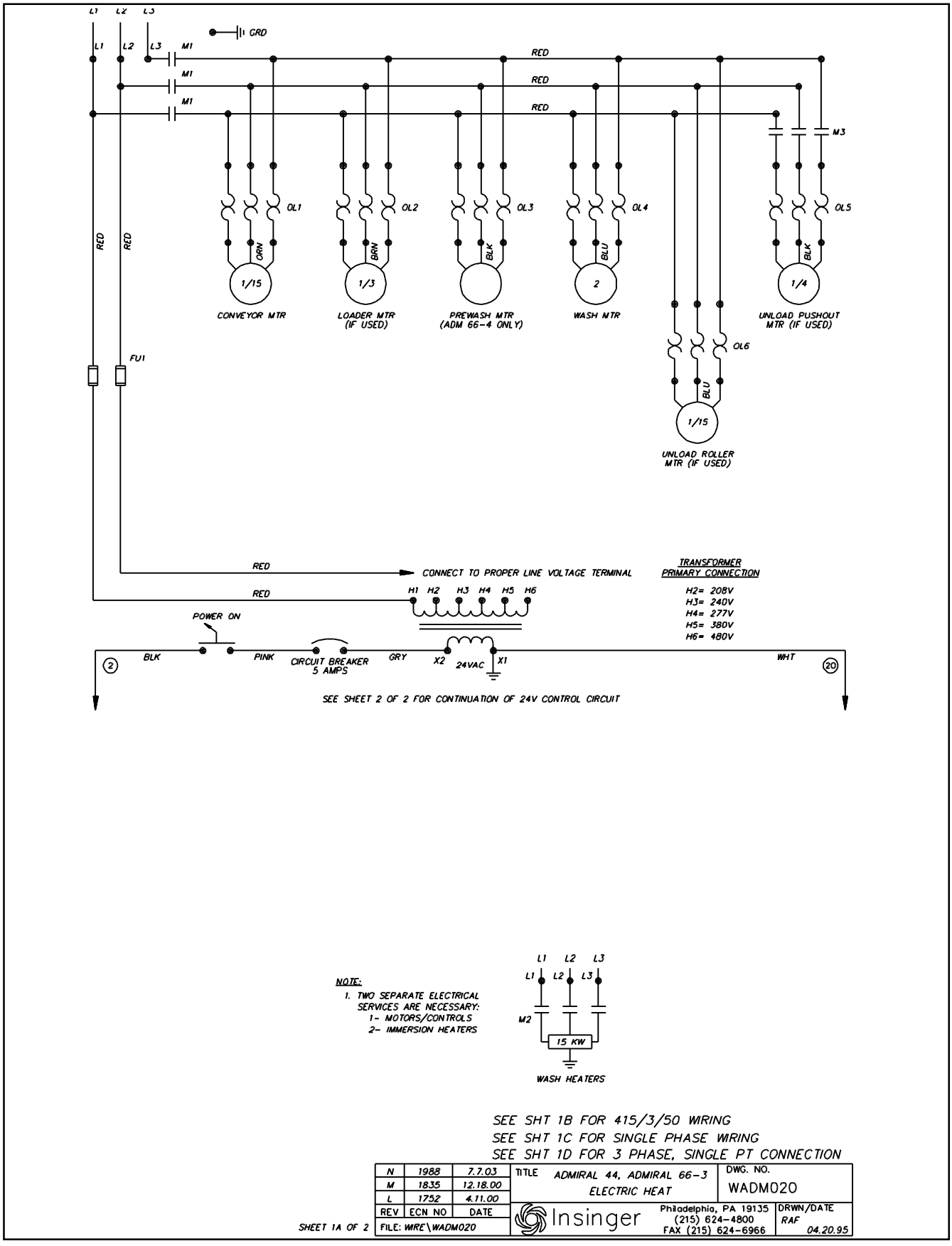
DRWN/DATE MFJ 8.12.99

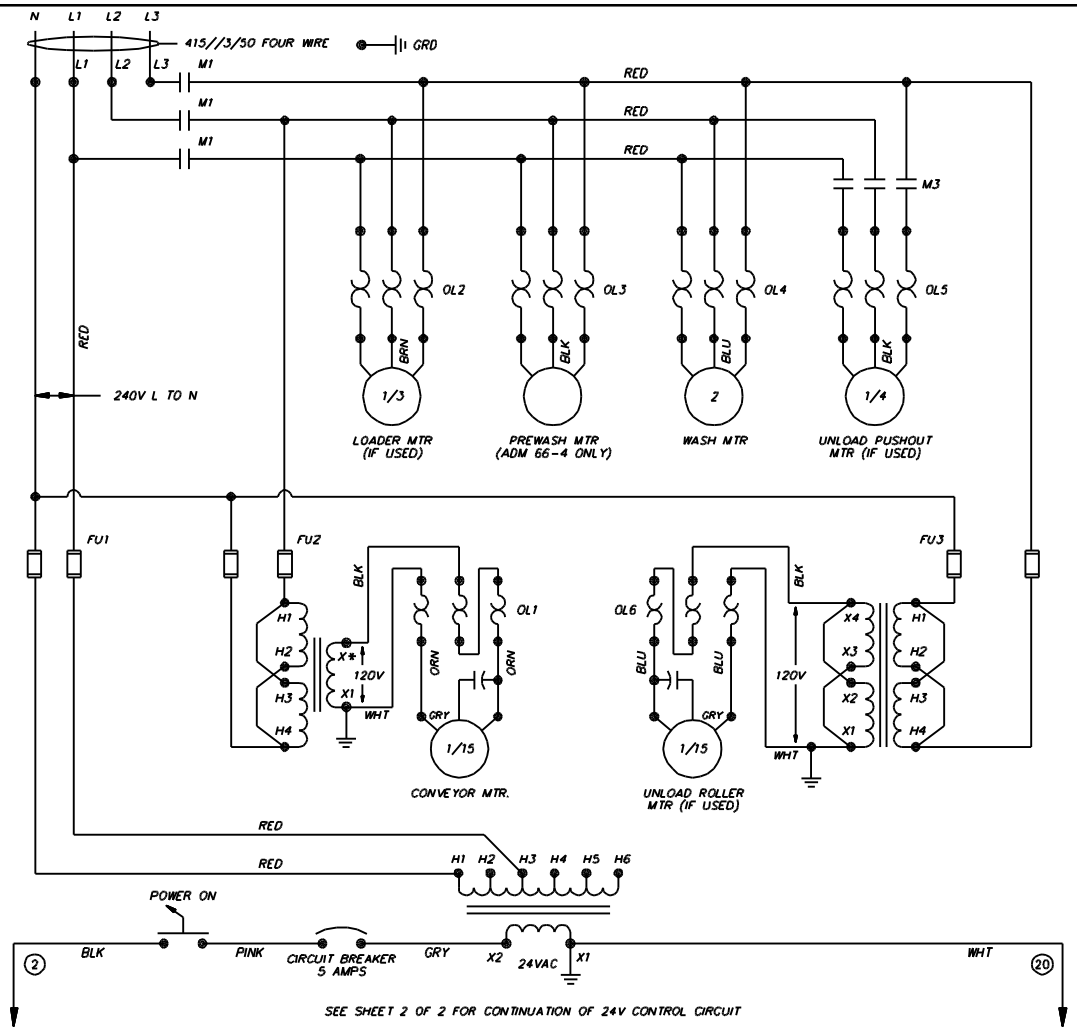
SHEET 1B OF 2



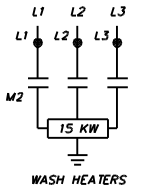
P	1752	4.11.00	TITLE ADMIRAL 44-4, ADMIRAL 66-4 STEAM HEAT	DWG. NO. WADM010
N	1701	8.12.99		
M	1583	12.1.97		
REV	ECN NO	DATE	Insinger Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966	DRWN/DATE RAF 04.10.95
FILE: WIRE\WADM010				

SHEET 2 OF 2

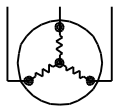

L1
L2
L3
GRD
M1
RED
OL1
OL2
OL3
OL4
OL5
OL6
M3
ORN
BRN
BLK
BLU
1/15
1/3
2
1/4
CONVEYOR MTR
LOADER MTR (IF USED)
PREWASH MTR (ADM 66-4 ONLY)
WASH MTR
UNLOAD PUSHOUT MTR (IF USED)
UNLOAD ROLLER MTR (IF USED)
FU1
CONNECT TO PROPER LINE VOLTAGE TERMINAL
TRANSFORMER PRIMARY CONNECTION
H1 H2 H3 H4 H5 H6
H2= 208V
H3= 240V
H4= 277V
H5= 380V
H6= 480V
POWER ON
BLK
PINK
CIRCUIT BREAKER 5 AMPS
GRY
X2
24VAC
X1
WHT
2
20
SEE SHEET 2 OF 2 FOR CONTINUATION OF 24V CONTROL CIRCUIT
NOTE:
1. TWO SEPARATE ELECTRICAL SERVICES ARE NECESSARY:
1- MOTORS/CONTROLS
2- IMMERSION HEATERS
M2
15 KW
WASH HEATERS
SEE SHT 1B FOR 415/3/50 WIRING
SEE SHT 1C FOR SINGLE PHASE WIRING
SEE SHT 1D FOR 3 PHASE, SINGLE PT CONNECTION
N 1988 7.7.03
M 1835 12.18.00
L 1752 4.11.00
REV ECN NO DATE
FILE: WIRE\WADM020
SHEET 1A OF 2
TITLE ADMIRAL 44, ADMIRAL 66-3 ELECTRIC HEAT
DWG. NO. WADM020
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
DRWN/DATE RAF 04.20.95



NOTE:
1. TWO SEPARATE ELECTRICAL SERVICES ARE NECESSARY:
   1- MOTORS/CONTROLS
   2- IMMERSION HEATERS



WASH HEATERS



TYP HEATER WIRING 415/3/50

415/3/50 WIRING ONLY

REV	ECN NO	DATE
N	1988	7.7.03
M	1835	12.18.00
L	1752	4.11.00

FILE: WIRE\WADM020

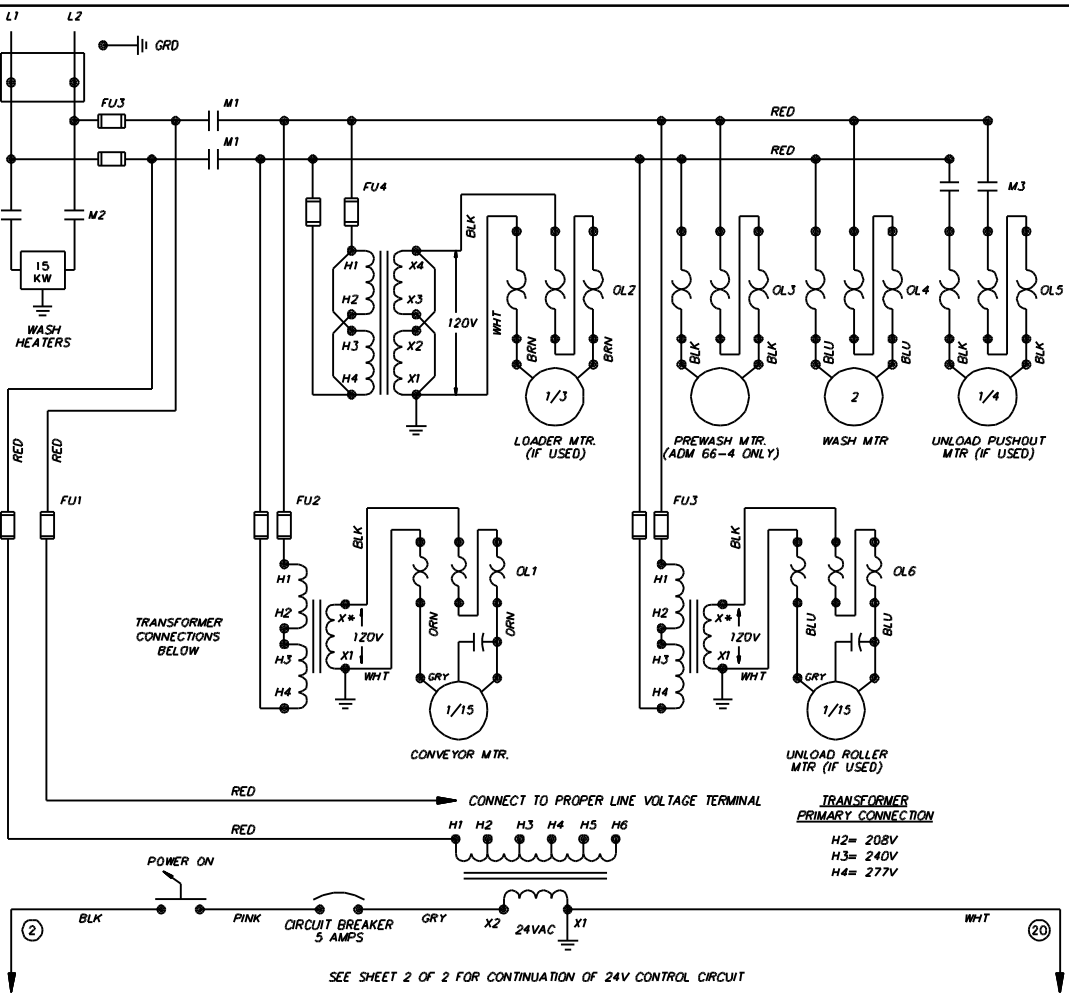
TITLE: ADMIRAL 44, ADMIRAL 66-3 ELECTRIC HEAT

DWG. NO. WADM020

Insinger Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966

DRWN/DATE RAF 04.20.95

SHEET 1B OF 2

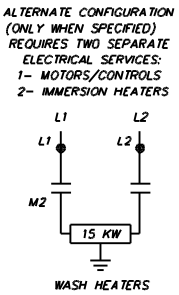


CONVEYOR MOTOR TRANSFORMER CONNECTIONS

	208 VAC	230 VAC	380 VAC	460 VAC
L1 TO	H1	H1 & H3	H1	H1
L2 TO	H2	H2 & H4	H4	H4
	–	–	–	H2 TO H3
X*	X3	X2	X3	X2

UNLOADER MOTOR TRANSFORMER CONNECTIONS

	208 VAC	230 VAC	380 VAC	460 VAC
L1 TO	H1 & H3	H1 & H3	H1	H1
L2 TO	H2 & H4	H2 & H4	H4	H4
	–	–	–	H2 TO H3
X*	X4	X4	X4	X4
	X1 TO X3	X1 TO X3	–	X1 TO X3
	X2 TO X4	X2 TO X4	–	X2 TO X4



SINGLE PHASE WIRING ONLY

REV	ECN NO	DATE
N	1988	7.7.03
M	1835	12.18.00
L	1752	4.11.00

SHEET 1C OF 2

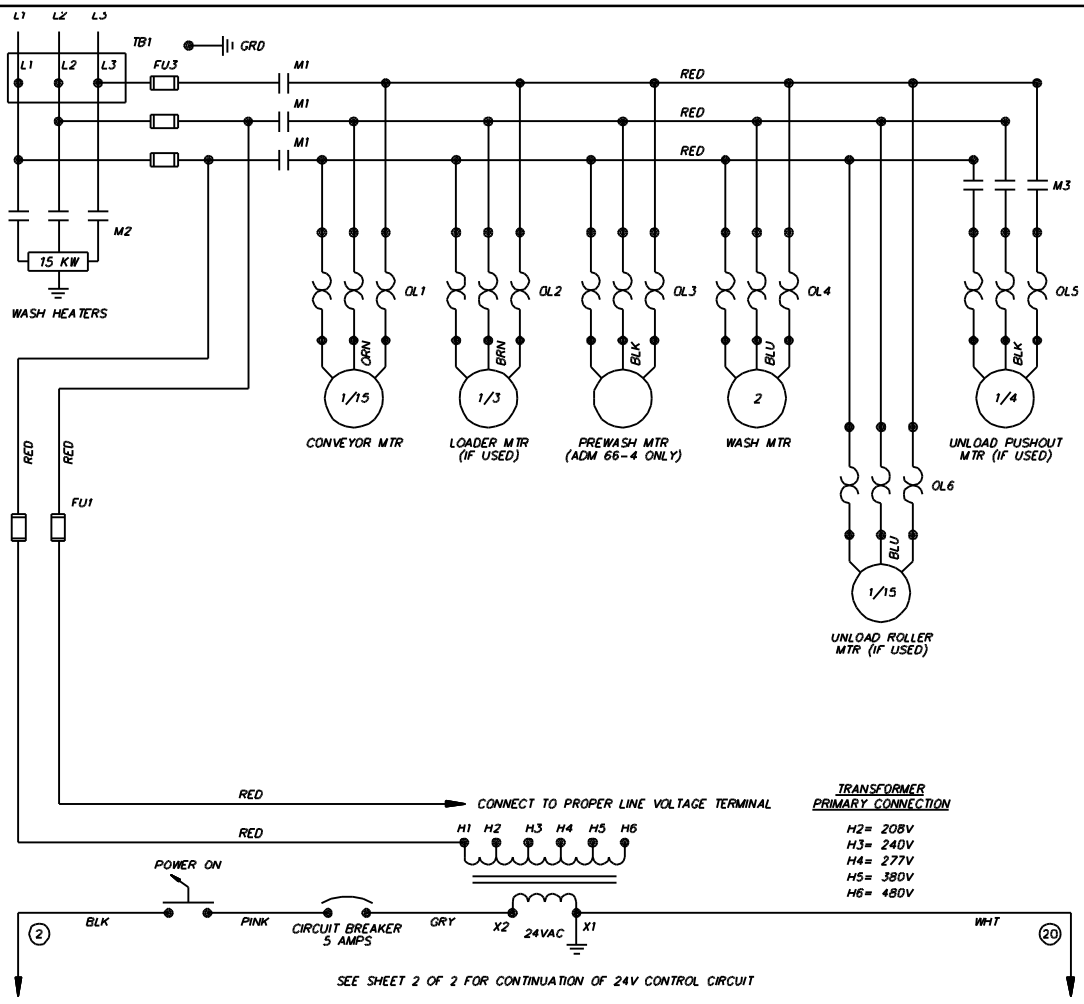
FILE: WIRE\WADM020

TITLE: ADMIRAL 44, ADMIRAL 66-3
ELECT. HEAT, SINGLE PHASE

DWG. NO. WADM020

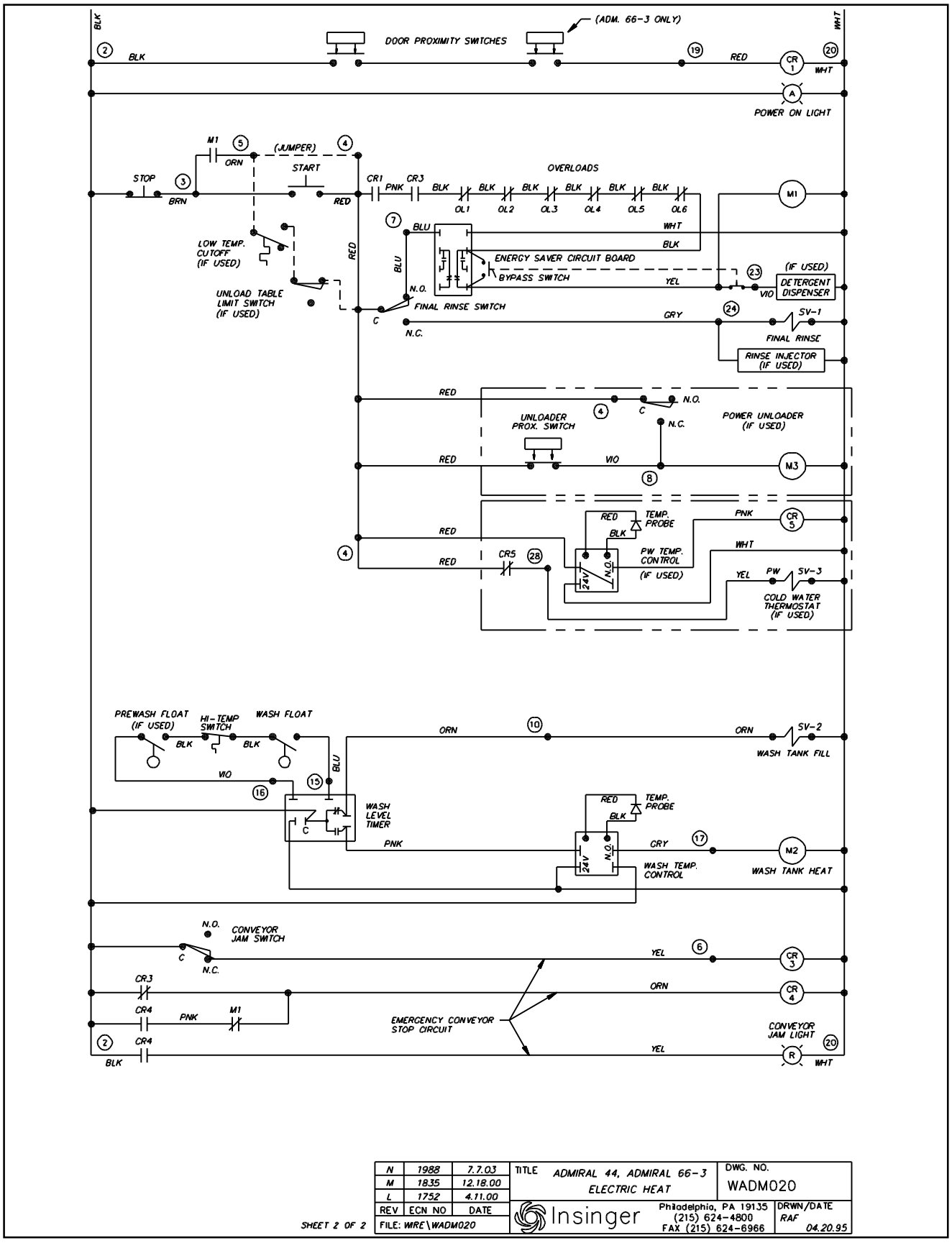
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966

DRWN/DATE MFJ 7.31.97



SINGLE PT CONNECTION ONLY

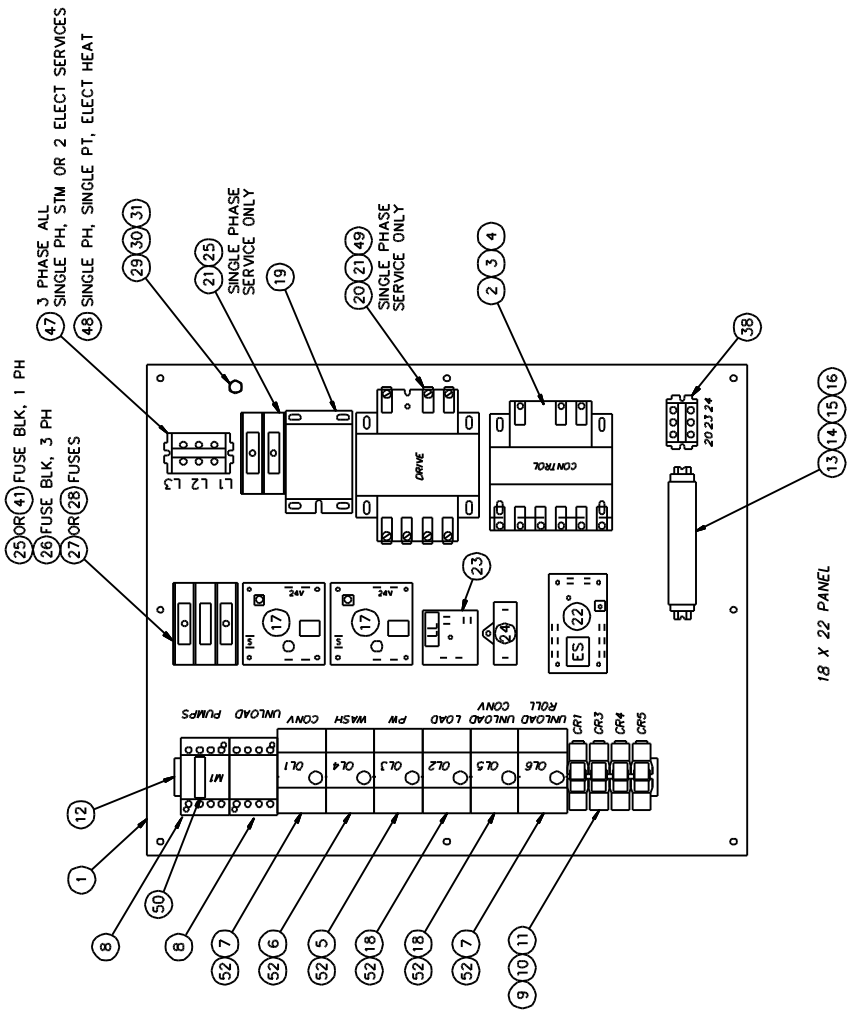
N	1988	7.7.03	TITLE ADMIRAL 44, ADMIRAL 66-3 ELECTRIC W/SINGLE PT. CONN.	DWG. NO. WADM020
M	1835	12.18.00		
L	1752	4.11.00		
REV	ECN NO	DATE	Insinger Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966	DRWN/DATE RAF 04.21.95
SHEET 10 OF 2	FILE: WIRE\WADM020			


(ADM. 66-3 ONLY)
DOOR PROXIMITY SWITCHES
POWER ON LIGHT
(JUMPER)
START
STOP
OVERLOADS
LOW TEMP. CUTOFF (IF USED)
UNLOAD TABLE LIMIT SWITCH (IF USED)
ENERGY SAVER CIRCUIT BOARD
BYPASS SWITCH
FINAL RINSE SWITCH
(IF USED)
DETERGENT DISPENSER
SV-1
FINAL RINSE
RINSE INJECTOR (IF USED)
UNLOADER PROX. SWITCH
POWER UNLOADER (IF USED)
TEMP. PROBE
PW TEMP. CONTROL (IF USED)
COLD WATER THERMOSTAT (IF USED)
PREWASH FLOAT (IF USED)
HI-TEMP SWITCH
WASH FLOAT
WASH LEVEL TIMER
SV-2
WASH TANK FILL
WASH TEMP. CONTROL
WASH TANK HEAT
CONVEYOR JAM SWITCH
EMERGENCY CONVEYOR STOP CIRCUIT
CONVEYOR JAM LIGHT
N
1988
7.7.03
M
1835
12.18.00
L
1752
4.11.00
REV
ECN NO
DATE
FILE: WIRE\WADM020
TITLE
ADMIRAL 44, ADMIRAL 66-3
ELECTRIC HEAT
DWG. NO.
WADM020
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
DRWN/DATE
RAF
04.20.95
SHEET 2 OF 2

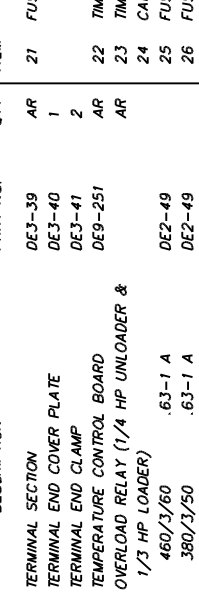
ITEM	DESCRIPTION	PART NO.	QTY
1	COMPONENT MOUNTING PLATE	SK-3720	1
2	TRANSFORMER (150 VA, 24 VAC)	DE6-9	1
3	FUSE BLOCK KIT (150 VA XFMR)	DE9-164	1
4	FUSE (150 VA TRANSFORMER PRIMARY)		2
	460 V FNQ-R-1	DE9-167	
	380 V FNQ-R-1.25	DE9-199	
	220 - 230 V FNQ-R-2	DE9-170	
	208 V FNQ-R-2.25	DE9-171	
5	OVERLOAD RELAY (1/2 HP PREWASH PUMP)		1
	460/3/60 1-1.6 A	DE2-50	
	380/3/50 1-1.6 A	DE2-50	
	230/3/60 1.6-2.5 A	DE2-52	
	220/3/50 1.6-2.5 A	DE2-52	
	220/1/60 4-6 A	DE2-54	
	208/3/60 1.6-2.5 A	DE2-52	
6	OVERLOAD RELAY (2 HP WASH PUMP)		1
	460/3/60 2.5-4 A	DE2-53	
	380/3/50 2.5-4 A	DE2-53	
	230/3/60 5.5-8 A	DE2-55	
	220/3/50 5.5-8 A	DE2-55	
	220/1/60 9-13 A	DE2-57	
	208/3/60 5.5-8 A	DE2-55	
7	OVERLOAD RELAY (1/15 HP CONV DRIVE)		AR
	460/3/60 .16-.25 A	DE2-91	
	380/3/50 .16-.25 A	DE2-91	
	230/3/60 .25-.40 A	DE2-92	
	220/3/50 .25-.40 A	DE2-92	
	208/3/60 .25-.40 A	DE2-92	
	115/1/60 .63-1 A	DE2-49	
8	CONTACTOR (MOTORS) SP4	DE1-93	AR
9	RELAY BASE	DE2-37	AR
10	RELAY	DE2-38	AR
11	RELAY HOLD DOWN SPRING	DE3-43	AR
12	DIN RAIL (35 mm)	DE9-84	1
13	DIN RAIL (15 mm)	DE3-42	1

SHEET 1 OF 2

TITLE	ADMIRAL CONTROL PANEL LAYOUT		DRWN/DATE
Insinger	Philadelphia, PA. 19135 (215) 624-4800 FAX (215) 624-6966		MFJ 5.1.95
	FILE: SKETCH\SK-3141		
V 1986	8.1.03	SCALE 1/4	DWG. NO. SK-3141
U 1945	7.17.02		
REV ECN NO	DATE		



ITEM	DESCRIPTION	PART NO.	QTY
14	TERMINAL SECTION	DE3-39	AR
15	TERMINAL END COVER PLATE	DE3-40	1
16	TERMINAL END CLAMP	DE3-41	2
17	TEMPERATURE CONTROL BOARD	DE9-251	AR
18	OVERLOAD RELAY (1/4 HP UNLOADER & 1/3 HP LOADER)		AR
	460/3/60 .63-1 A	DE2-49	
	380/3/50 .63-1 A	DE2-49	
	230/3/60 1-1.6 A	DE2-50	
	220/3/50 1-1.6 A	DE2-50	
	220/1/60 UNLDR 2.5-4 A	DE2-53	
	208/3/60 1-1.6 A	DE2-50	
	115/1/60 LDR 5.5-8 A	DE2-55	
19	CONTACTOR (ELECT WASH TANK HEAT ONLY)		1
	460/3/60 30 A RES	DE1-109	
	380/3/50 30 A RES	DE1-109	
	230/3/60 50 A RES	DE1-110	
	220/3/50 50 A RES	DE1-110	
	220/1/60 SP47	DE1-94	
	208/3/60 50 A RES	DE1-110	
20	TRANSFORMER (250 VA, 120 VAC CONV)		1
	220 - 240 V	DE6-10	
	208 V	DE6-21	
21	FUSE (250 VA TRANSFORMER PRIMARY)		2
	220 - 240 V FNQ-R-3.5	DE9-174	
	208 V FNQ-R-4	DE9-175	
22	TIME DELAY BOARD (ENERGY SAVER)	DE7-28	1
23	TIMER (LIQUID LEVEL)	DE7-35	1
24	CAPACITOR (120 V CONV MTR ONLY)	D2888	AR
25	FUSE BLOCK, 2 POLE (FNQ-R FUSE)	DE9-185	1
26	FUSE BLOCK, 3 POLE (SING. PT. CONN)	DE9-186	1
27	FUSE (SINGLE PT. CONN - ADM 44)		3
	460 V, 3 PH FNQ-R-8	DE9-179	
	380 V, 3 PH FNQ-R-10	DE9-181	
	230 V, 3 PH FNQ-R-15	DE9-183	
	208 V, 3 PH FNQ-R-20	DE9-184	
	208-240 V, 1 PH FNQ-R-30	DE9-227	
28	FUSE (SINGLE PT. CONN - ADM 66-4)		3
	460 V, 3 PH FNQ-R-10	DE9-181	
	380 V, 3 PH FNQ-R-10	DE9-181	
	230 V, 3 PH FNQ-R-20	DE9-184	
	208 V, 3 PH FNQ-R-20	DE9-184	
	208-240 V, 1 PH FRN-R-35	DE9-153	
29	GROUNDING STUD	D309C-GC-4G	1
30	LOCKWASHER, 1/4"	D313C-G5	1
31	HEX NUT, 1/4-20	D312C-GC-2	1
32	CONTROL BOX	SK-3716	1
33	CONTROL BOX COVER	SK-3717	1
34	GASKET	9007-001	1
35	NUT	D312C-EF-5	4
36	DECAL	SK-3700	1
37	DATA DECAL	SK-3715	1
38	TERMINAL BLK ASSY	DE3-9	1
39	SELECTOR SWITCH ASSY	DE8-58	2
40	PUSHBUTTON ASSY, START	DE8-64	1
41	FUSE BLOCK, 2 POLE (FRN-R FUSE)	DE9-253	1
42	PILOT LIGHT ASSY - YELLOW	DE8-62	1
43	PILOT LIGHT ASSY - RED	DE8-61	1
44	CONTACT BLOCK, NC	DE8-60	1
45	CIRCUIT BREAKER (5A)	DE9-43	1
46	CONTACT BLOCK, NO	DE8-59	1
47	TERMINAL BLOCK ASSY	DE3-3	1
48	TERMINAL BLK (SINGLE PT CONN, 1 PH)	DE3-154	1
49	FUSE BLOCK KIT (250 VA XFMR)	DE9-164	1
50	AUXILIARY CONTACT, NC	DE1-61AE	1
51	PUSHBUTTON ASSY, STOP	DE8-65	1
52	OVERLOAD BASE	DE2-60	AR
NOT SHOWN			
	ELECTRIC IMMERSION HEATER (7.5 KW)		2
	440-480 V, 3 PH	DE13-SE73	
	380 V, 3 PH	DE13-SE53	
	220-240 V, 3 PH	DE13-SE43	
	208 V, 3 PH	DE13-SE23	
	220-240 V, 1 PH	DE13-SE41	
	208 V, 1 PH	DE13-SE21	
	TRANSFORMER FOR UNLOADER (SINGLE PH SERVICE ONLY)		1
	250 VA	DE6-26	
	TEMPERATURE SENSOR	DE9-252	AR

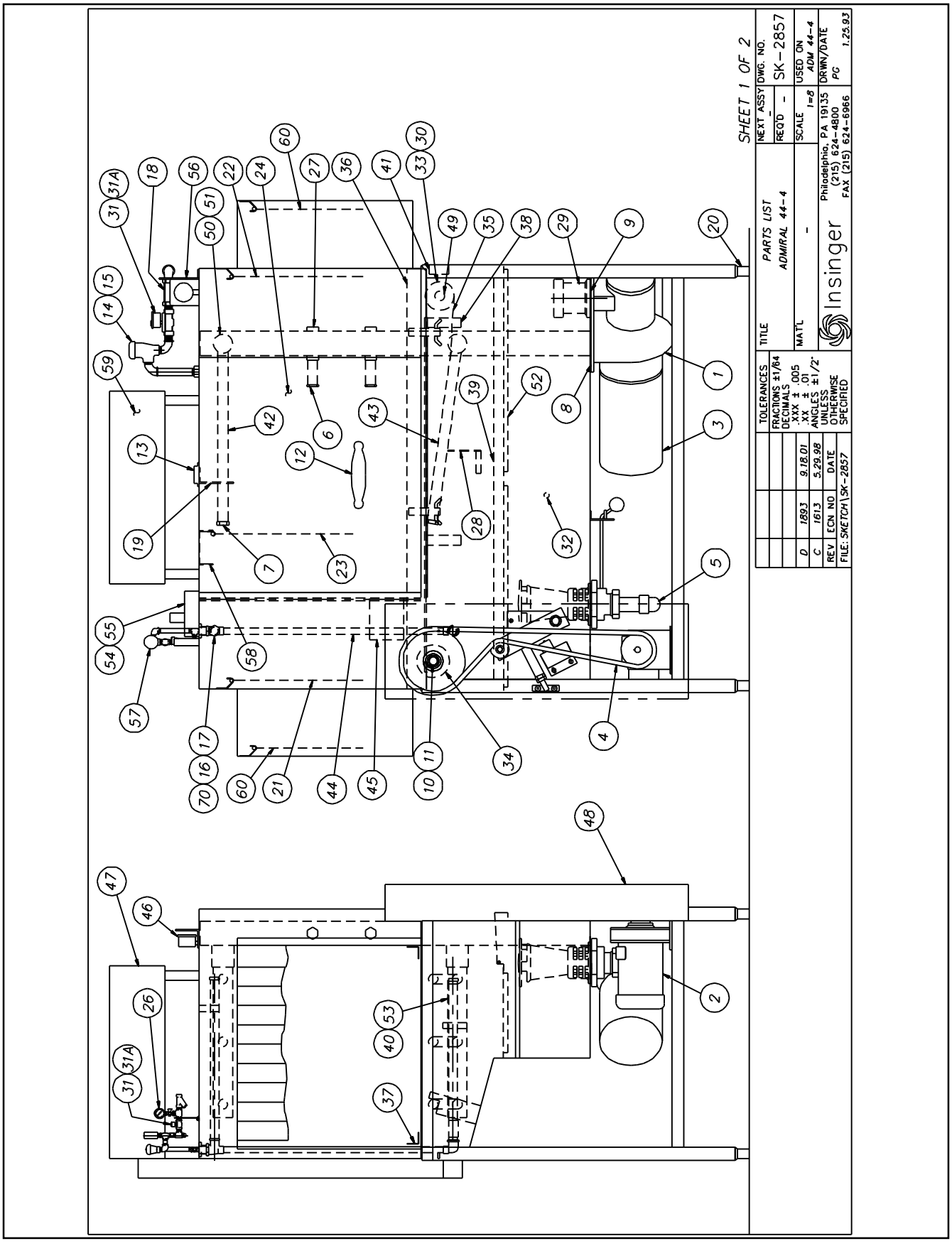


SHEET 2 OF 2

TITLE	ADMIRAL CONTROL PANEL LAYOUT		
Insinger	Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966	DRWN/DATE MFJ	5.1.95
	FILE: SKETCH\SK-3141		
V	1986	8.1.03	SCALE 1/4
U	1945	7.17.02	DWG. NO. SK-3141
REV	ECN NO	DATE	

RECOMMENDED ADMIRAL SERIES SPARE PARTS LIST

Part Number	Quantity	Description
Mechanical Parts		
32-541	1	Suction Strainer
D2242	1	Vacuum Breaker Repair Kit
D2-554-3	4	End Plug
D2-554-2	4	End Plug
D2498	3	Spray Nozzle, FR
D2700	3	Spray Nozzle, FR
D2390	1	Temperature Gauge– Wash
UP15	1	Seal, Pump
954-30K	1	Drain Assembly
D2-104	1	Shaft Bearings
D2-761	1	O-ring, Manifold
D2495	1	Temperature Gauge– FR
D2930RK	1	Solenoid Valve Repair Kit, 1/2” Water
Electrical Components		
DE3-68	1	Timer
DE7-33	1	Timer, Level
DE5-60	1	Level Float
DE9-251	1	Temperature Control Board
DE1-93	1	Magnetic Switch
DE9-252	1	Switch
For Electric Tank Heat Add:		
DE13-SE73		Immersion Heater
For Steam Tank Heat Add:		
D2946		Kit, 3/4” Steam


SHEET 1 OF 2
PARTS LIST
ADMIRAL 44-4
NEXT ASSY
REQ'D -
DWG. NO. SK-2857
USED ON ADM 44-4
SCALE 1=8
DRWN/DATE PG 1.25.93
MATL -
TITLE
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
REV ECN NO DATE
D 1893 9.18.01
C 1613 5.29.98
FILE: SKETCH\SK-2857

ITEM#	PART#	DESCRIPTION	REQ.
1	**	PUMP & MOTOR, WASH	1
2	D2762	GEAR MOTOR	1
3	**	MOTOR	1
4	1397-1	DRIVE MECHANISM ASSEMBLY (SEE PARTS LIST)	1
5	1169-60	DRAIN ASSEMBLY (SEE PARTS LIST)	1
6	D2-554-3	PIPE PLUG 7/8-9UNC-2A	2
7	D2-554-2	PIPE PLUG 3/4-10UNC-2A	8
8	D514	DISCHARGE GASKET	1
9	D530	SUCTION GASKET	1
10	1162-110	BEARING BRACKET FRONT & REAR	2
11	1162-16	CONVEYOR DRIVE SHAFT	1
12	D2099	DOOR HANDLE	1
13	DE5-37	MAGNETIC SWITCH	1
14	D2914	VACUUM BREAKER 1/2	2
15	D2914RK	VACUUM BREAKER REPAIR KIT 1/2	2
16	D2856	SPRAY NOZZLE - UPPER	3
17	1472-19A	SPRAY PIPE FINAL RINSE - UPPER	1
18	D2339	BALL VALVE 1/2	1
19	D2349	LATCH ASSEMBLY (SPRAY PIPE)	1
20	D2406	ADJUSTABLE FOOT	4
21	D3-528	CURTAIN - EXIT	1
22	D3-525	CURTAIN - ENTER	1
23	D3-508	CURTAIN - CENTER	1
24	1472-22	DOOR	1
25	D2715-R	DOOR LATCH, RIGHT	2
	D2715-L	DOOR LATCH, LEFT	2
26	SK-1433	PRESSURE GAUGE	1
27	1169-40	DISCHARGE TUBE ASSEMBLY (SEE PARTS LIST)	1
28	1162-31	STATIONARY STOP	1
29	D2-541	SUCTION STRAINER	1
30	D2858	HUB SPACER	1

ITEM#	PART#	DESCRIPTION	REQ.
31	D2606	SOLENOID VALVE	2
31A	D2641	SOLENOID VALVE REPAIR KIT	2
32	1089-189	FLOAT SWITCH ASSEMBLY	1
33	D2857	DRIVEN SPROCKET	1
34	512-207A	DRIVE SPROCKET	1
35	9014-TAB	CONVEYOR CHAIN	1
36	1183-12	FRONT TRACK	1
37	1169-25	REAR TRACK ASSEMBLY (SEE PARTS LIST)	1
38	1183-9	TRACK BRACKET	3
39	1183-48	SCRAP SCREEN SPACER	1
40	1472-18A	SPRAY PIPE FINAL RINSE - LOWER	1
41	1169-159	CHAIN TENSIONER ASSEMBLY (SEE PARTS LIST)	1
42	1169-53	MANIFOLD ASSEMBLY - UPPER	1
43	1169-54	MANIFOLD ASSEMBLY - LOWER	1
44	1169-45	FINAL RINSE-INSIDE PIPING (STANDARD)	1
	1169-43	FINAL RINSE-INSIDE PIPING (CHEMICAL SANITIZER)	1
45	1169-145	FINAL RINSE - LEVER ASSEMBLY	1
46	D2390	THERMOMETER	1
47	1169-62	CONTROL BOX & CHANNEL	1
48	1162-60	MECHANISM GUARD	1
49	1169-165	CONVEYOR FOLLOWER SHAFT	1
50	D3-849	STOP BRACKET, UPPER MANIFOLD	1
51	D2-564	O-RING, MANIFOLD	2
52	1182-29	SCRAP SCREEN	2
53	D2853	SPRAY NOZZLE - LOWER	4
54	816-58	SPRING	1
55	DE5-4	SWITCH, FINAL RINSE	1
56	828-52	BRACKET, PIPING	1
57	D2495	THERMOMETER, FINAL RINSE	1
58	1169-56	TOP BAFFLE INSTALLATION	1
59	SK-3700	LABEL LOCATION	1
60	D3-550	CURTAIN - VESTIBULE	2

** = MUST SPECIFY SERIAL NO. OF MACHINE

SHEET 2 OF 2

REV	ECN NO	DATE
D	1893	9.18.01
C	1613	5.29.98

FILE: SKETCH\SK-2857

TOLERANCES: FRACTIONS ±1/64, DECIMALS .XXX ± .005, .XX ± .01, ANGLES ±1/2° UNLESS OTHERWISE SPECIFIED

TITLE: PARTS LIST ADMIRAL 44-4

MAT'L: NOTED

NEXT ASSY: -

REQ'D: NOTED

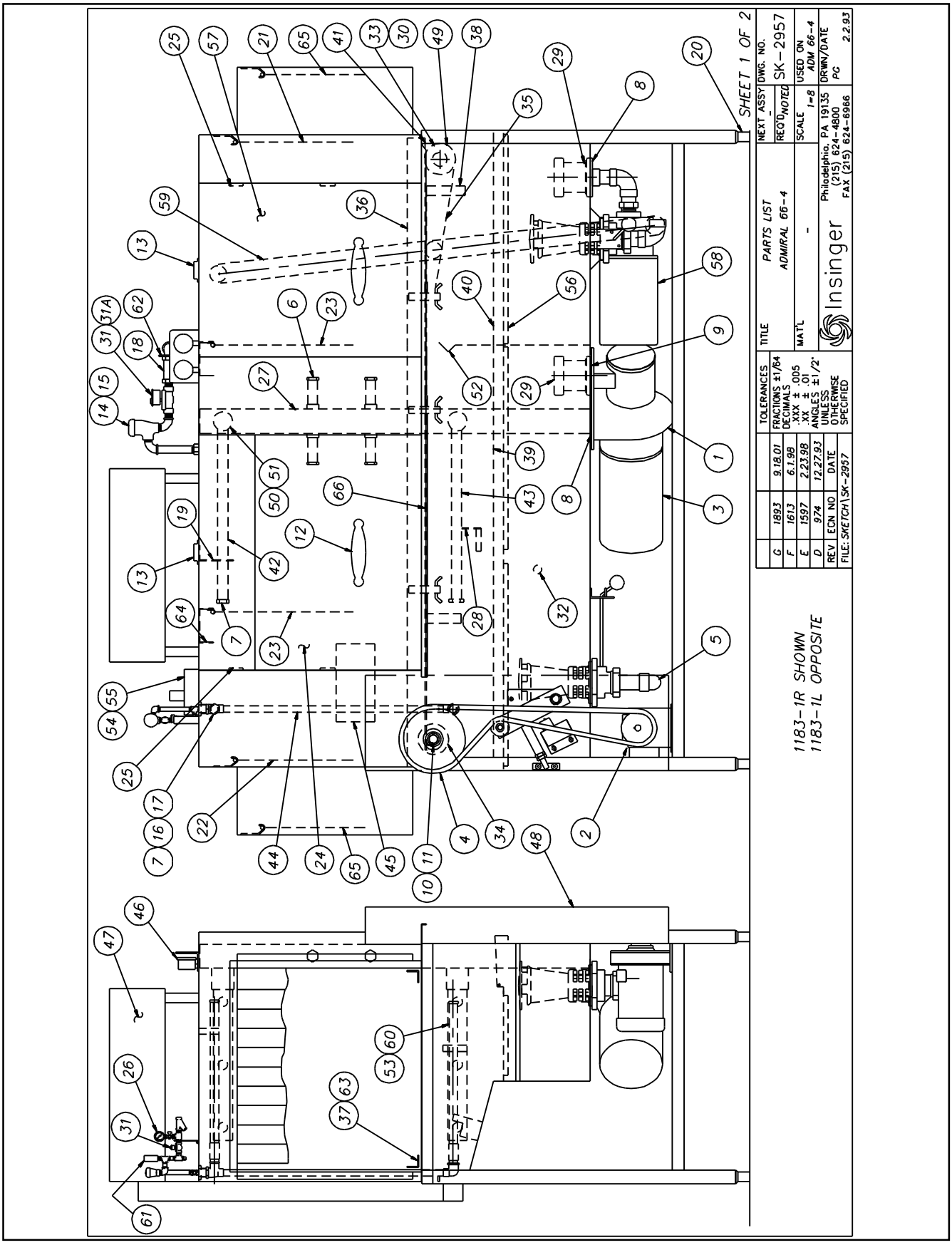
SCALE: FULL

DWG. NO.: SK-2857

USED ON: ADM 44-4

DRWN/DATE: MAM 10.18.93

Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6986


SHEET 1 OF 2
PARTS LIST
ADMIRAL 66-4
SK-2957
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
1183-1R SHOWN
1183-1L OPPOSITE

ITEM#	PART#	DESCRIPTION	REQ.
1	**	PUMP & MOTOR, WASH	1
2	D2762	GEAR MOTOR	1
3	**	MOTOR	1
4	1397-1	DRIVE MECHANISM ASSEMBLY (SEE PARTS LIST)	1
5	1169-60	DRAIN ASSEMBLY (SEE PARTS LIST)	2
6	D2-554-3	PIPE PLUG 7/8-9UNC-2A	4
7	D2-554-2	PIPE PLUG 3/4-10UNC-2A	10
8	D514	DISCHARGE GASKET	2
9	D530	SUCTION GASKET	1
10	1162-110	BEARING BRACKET	2
11	1162-16	CONVEYOR DRIVE SHAFT	1
12	D2099	DOOR HANDLE	2
13	DE5-37	MAGNETIC SWITCH	2
14	D2914	VACUUM BREAKER 1/2	2
15	D2914RK	VACUUM BREAKER REPAIR KIT 1/2	2
16	D2856	SPRAY NOZZLE - UPPER	3
17	1472-19A	SPRAY PIPE FINAL RINSE - UPPER	1
18	D2339	BALL VALVE 1/2	1
19	D2349	LATCH ASSEMBLY (SPRAY PIPE)	1
20	D2406	ADJUSTABLE FOOT	4
21	D3-527	CURTAIN - ENTER	1
22	D3-528	CURTAIN - EXIT	1
23	D3-508	CURTAIN - CENTER	2
24	1169-22	DOOR (WASH)	1
25	D2715-R	DOOR LATCH, RIGHT	2
	D2715-L	DOOR LATCH, LEFT	2
26	SK-1433	PRESSURE GAUGE	1
27	1183-50	DISCHARGE TUBE ASSEMBLY - WASH	1
28	1162-31	STATIONARY STOP	1
29	D2-541	SUCTION STRAINER	2
30	D2858	HUB SPACER	1
31	D2606	SOLENOID VALVE	2
31A	D2641	SOLENOID VALVE REPAIR KIT	2

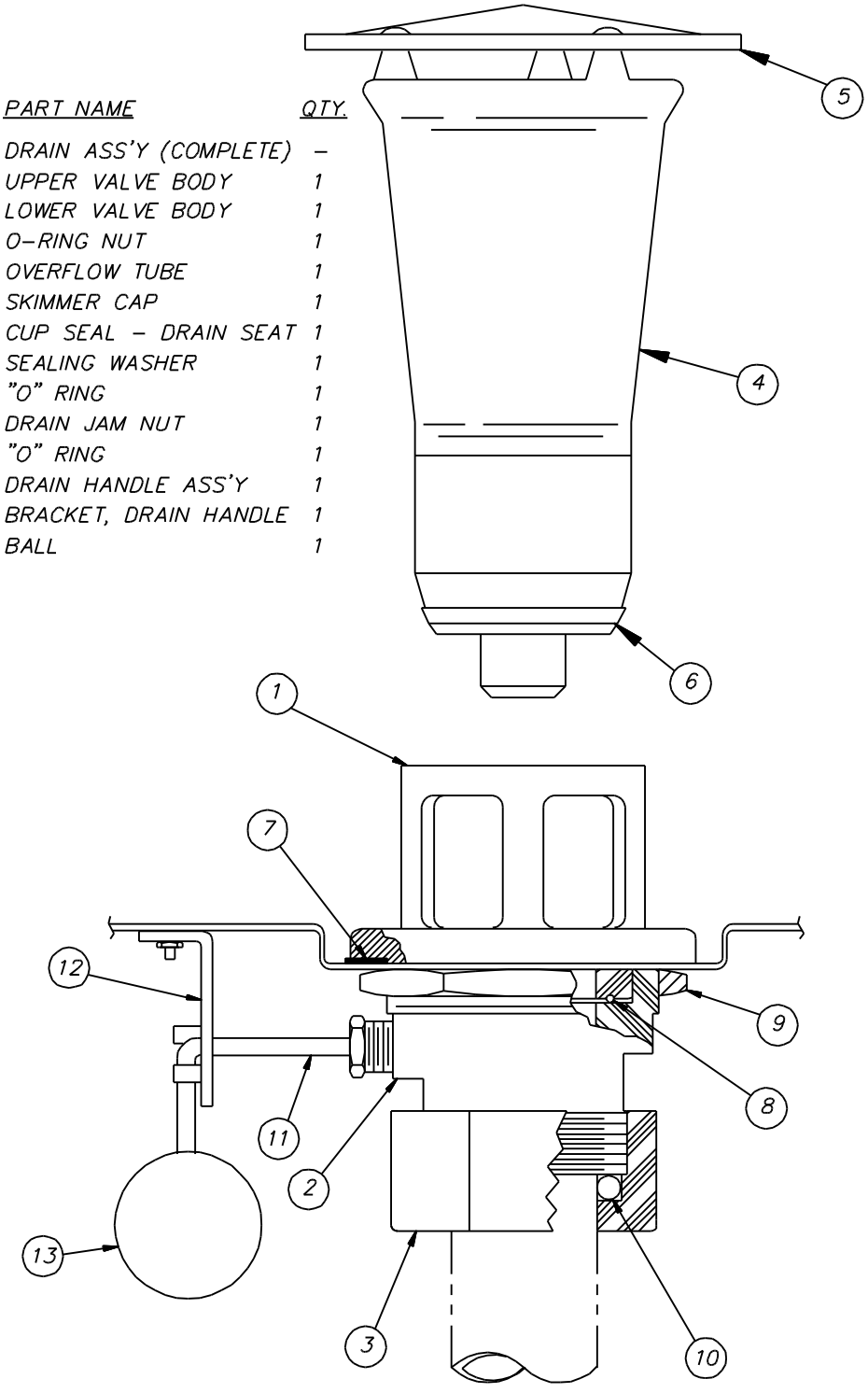
** = MUST SPECIFY SERIAL NO. OF MACHINE

ITEM#	PART#	DESCRIPTION	REQ.
32	1089-189	FLOAT SWITCH ASSEMBLY	1
33	512-206A	DRIVEN SPROCKET	1
34	512-207A	DRIVE SPROCKET	1
35	9014-010	CONVEYOR CHAIN	1
36	1183-12	FRONT TRACK	1
37	1460-11	REAR TRACK ASSEMBLY (SEE PARTS LIST)	1
38	1440-10	TRACK BRACKET - FRONT	3
39	1183-48	SCRAP SCREEN SPACER - WASH	1
40	1182-28	SCRAP SCREEN SPACER - PREWASH	1
41	1169-159	CHAIN TENSIONER ASSEMBLY (SEE PARTS LIST)	1
42	1169-53	MANIFOLD ASSEMBLY - UPPER	1
43	1169-54	MANIFOLD ASSEMBLY - LOWER	1
44	1169-45	FINAL RINSE - INSIDE PIPING	1
45	1169-145	FINAL RINSE - LEVER ASSEMBLY	1
46	D2390	THERMOMETER	2
47	1183-23	CONTROL BOX & CHANNEL	2
48	1162-60	MECHANISM GUARD	1
49	1169-165	CONVEYOR FOLLOWER SHAFT	1
50	D3-849	STOP BRACKET, UPPER MANIFOLD	1
51	D-580	O-RING, MANIFOLD	2
52	1169-38R	TANK BAFFLE	1
53	D2853	SPRAY NOZZLE - LOWER	4
54	816-58	SPRING	1
55	DE5-4	SWITCH, FINAL RINSE	1
56	1182-29	SCRAP SCREEN	3
57	1460-14	DOOR (PREWASH)	1
58	**	MOTOR (PREWASH)	1
59	1460-21	DISCHARGE LINE ASSEMBLY - PREWASH	1
60	1472-18A	SPRAY PIPE FINAL RINSE - LOWER	1
61	D2495	THERMOMETER, FINAL RINSE	1
62	828-52	BRACKET, PIPING SUPPORT	1
63	1440-13	TRACK BRACKET - REAR	3
64	1183-21	TOP BAFFLE INSTALLATION	1
65	D3-550	CURTAIN - VESTIBULE	2
66	1440-13	TRACK BRACKET - REAR	3

SHEET 2 OF 2

			TOLERANCES	TITLE: PARTS LIST, ADMIRAL 66-4	NEXT ASSY: -	DWG. NO.
			FRACTIONS ±1/64 DECIMALS .XXX ± .005 .XX ± .01 ANGLES ±1/2°		REQ'D: -	SK-2957
				MAT'L: NOTED	SCALE: FULL	USED ON: ADM 66-4
G	1893	9.18.01		Insinger, Philadelphia, PA 19135, (215) 624-4800, FAX (215) 624-6966		DRWN/DATE: PG 10.18.93
REV	ECN NO	DATE	UNLESS OTHERWISE SPECIFIED			
FILE: SKETCH\SK-2957						

ITEM	PART NO.	PART NAME	QTY.
	954-50	DRAIN ASS'Y (COMPLETE)	-
1	954-50A	UPPER VALVE BODY	1
2	954-50B	LOWER VALVE BODY	1
3	954-50C	O-RING NUT	1
4	1169-179D	OVERFLOW TUBE	1
5	D193	SKIMMER CAP	1
6	D2-557	CUP SEAL - DRAIN SEAT	1
7	954-9	SEALING WASHER	1
8	D2-549	"O" RING	1
9	D305A	DRAIN JAM NUT	1
10	D2-550	"O" RING	1
11	1100-79A	DRAIN HANDLE ASS'Y	1
12	954-8C	BRACKET, DRAIN HANDLE	1
13	D2-507	BALL	1



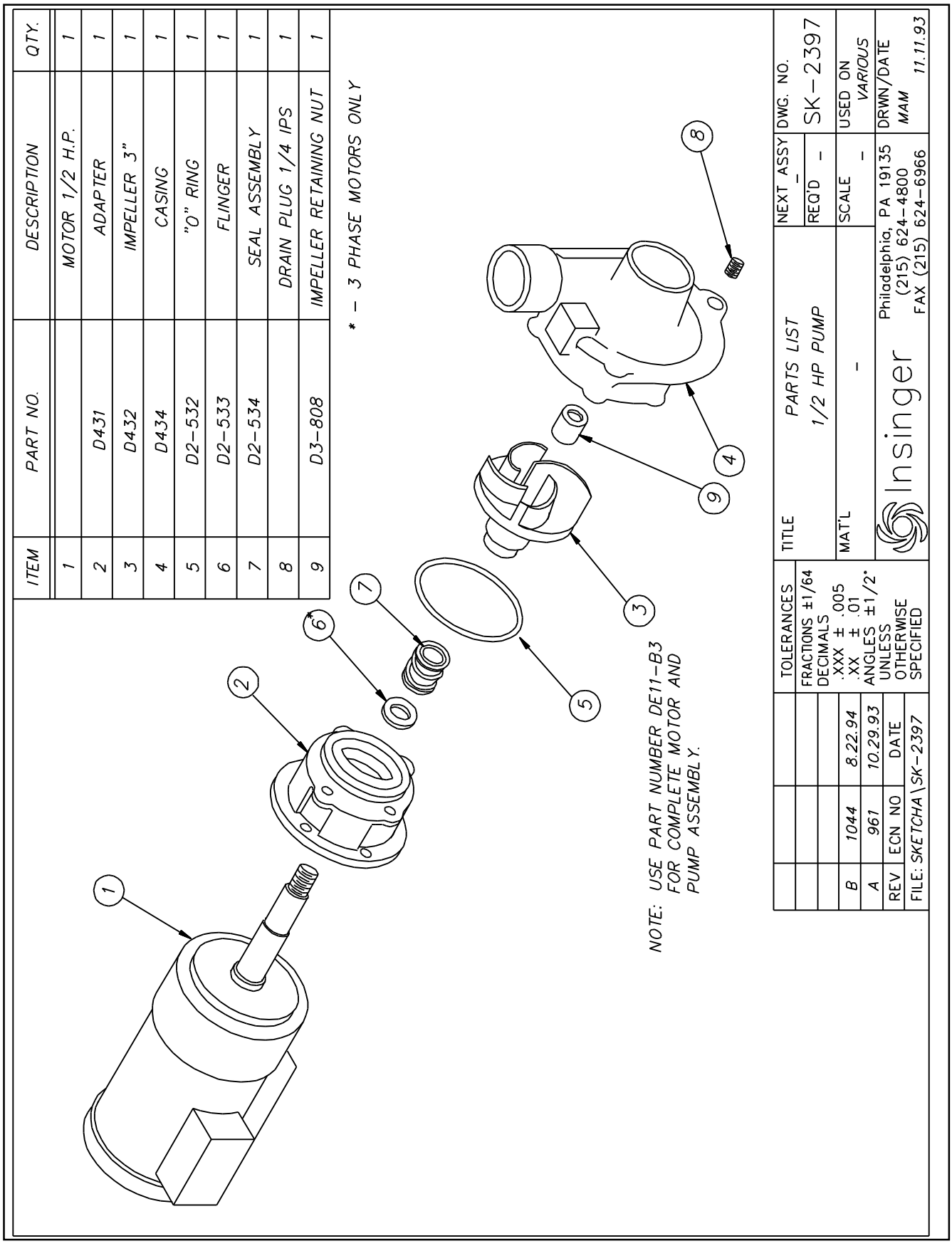
D ECN# 1989 7.7.03
C ECN# 1761 5.5.00
B ECN# 1512 12.20.96

FILE: SKETCHA\SK-3028

MAM 2.11.93

SK-3028

Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966



ITEM	PART NO.	DESCRIPTION	QTY.
1		MOTOR 1/2 H.P.	1
2	D431	ADAPTER	1
3	D432	IMPELLER 3"	1
4	D434	CASING	1
5	D2-532	"O" RING	1
6	D2-533	FLINGER	1
7	D2-534	SEAL ASSEMBLY	1
8		DRAIN PLUG 1/4 IPS	1
9	D3-808	IMPELLER RETAINING NUT	1

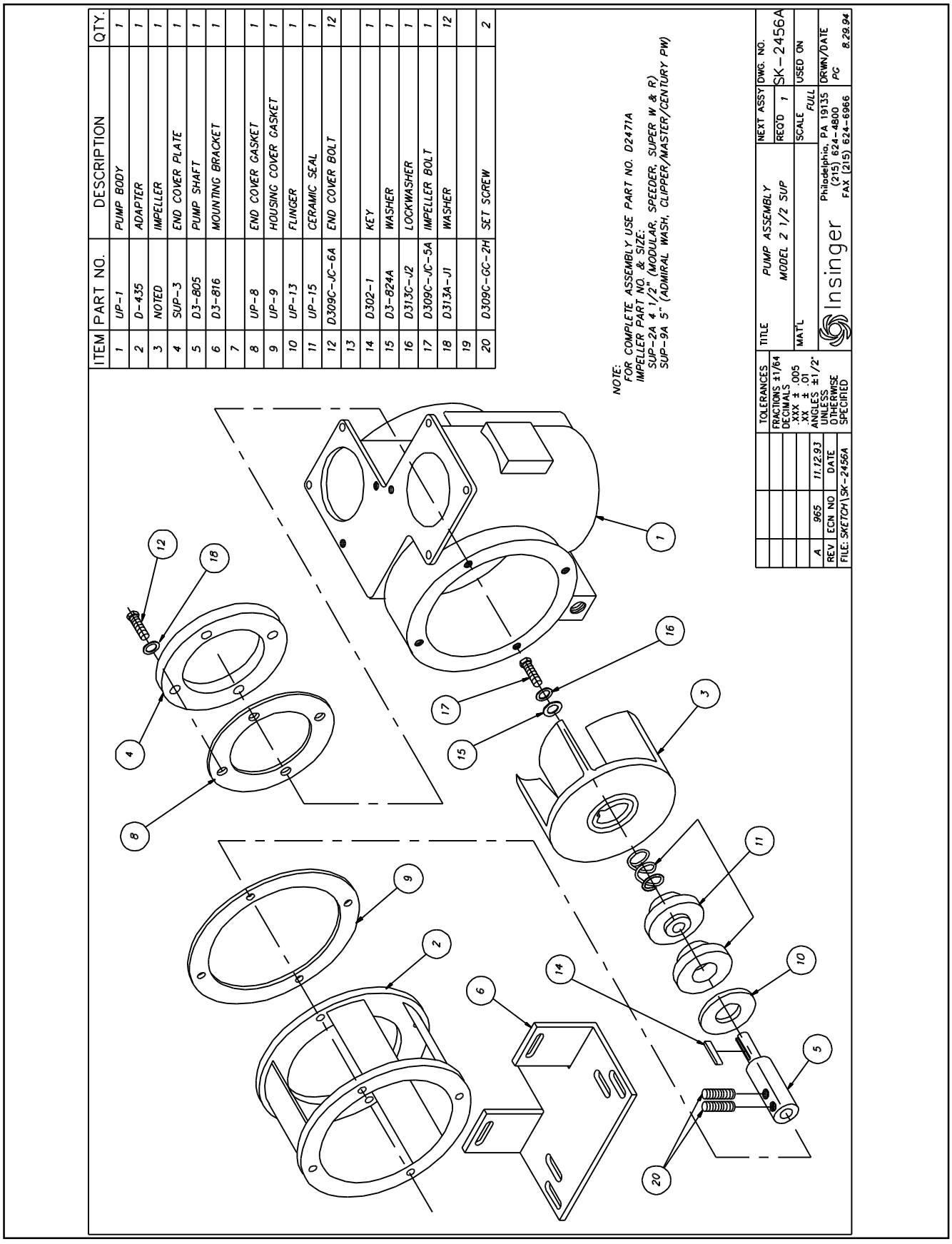
* - 3 PHASE MOTORS ONLY

NOTE: USE PART NUMBER DE11-B3 FOR COMPLETE MOTOR AND PUMP ASSEMBLY.

			TOLERANCES	TITLE	PARTS LIST 1/2 HP PUMP
			FRACTIONS ±1/64		
			DECIMALS .XXX ± .005 .XX ± .01	MAT'L -	
B	1044	8.22.94	ANGLES ±1/2°		
A	961	10.29.93	UNLESS OTHERWISE SPECIFIED		
REV	ECN NO	DATE			
FILE: SKETCHA\SK-2397					

Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966

NEXT ASSY	DWG. NO.
-	SK-2397
REQ'D -	USED ON VARIOUS
SCALE -	DRWN/DATE MAM 11.11.93



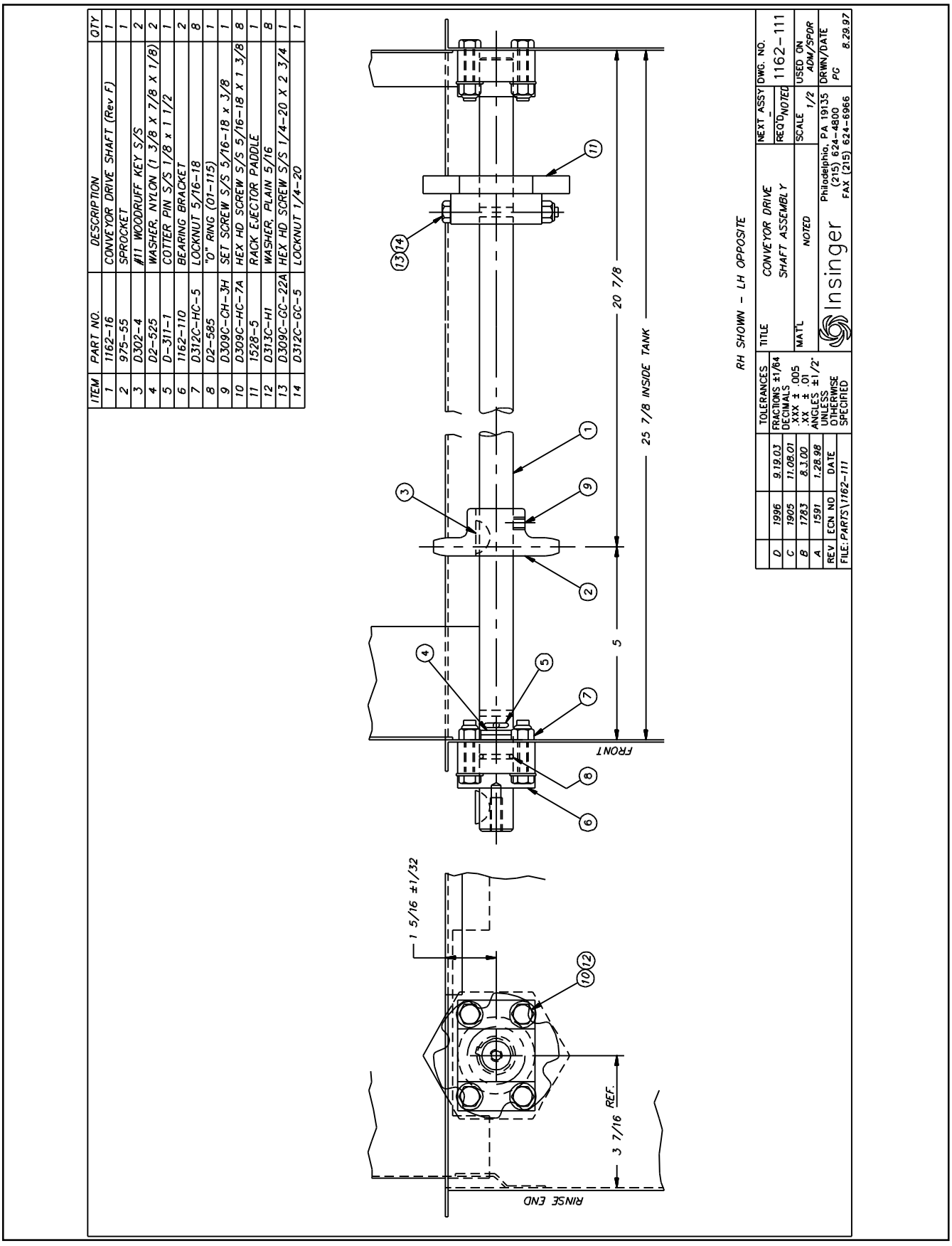
ITEM	PART NO.	DESCRIPTION	QTY.
1	UP-1	PUMP BODY	1
2	D-435	ADAPTER	1
3	NOTED	IMPELLER	1
4	SUP-3	END COVER PLATE	1
5	D3-805	PUMP SHAFT	1
6	D3-816	MOUNTING BRACKET	1
7			
8	UP-8	END COVER GASKET	1
9	UP-9	HOUSING COVER GASKET	1
10	UP-13	FLINGER	1
11	UP-15	CERAMIC SEAL	1
12	D309C-JC-6A	END COVER BOLT	12
13			
14	D302-1	KEY	1
15	D3-824A	WASHER	1
16	D313C-J2	LOCKWASHER	1
17	D309C-JC-5A	IMPELLER BOLT	1
18	D313A-J1	WASHER	12
19			
20	D309C-GC-2H	SET SCREW	2

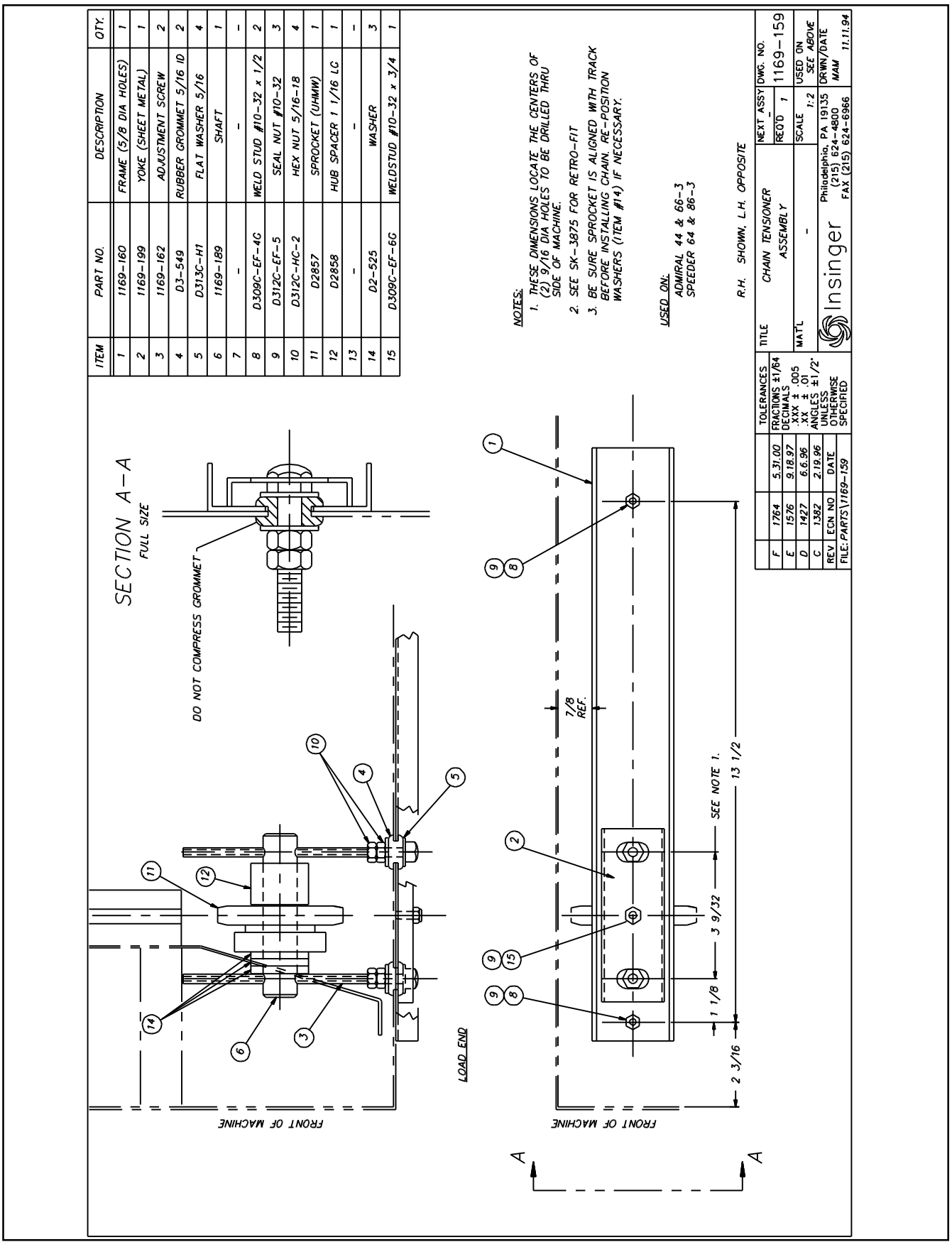
NOTE:
FOR COMPLETE ASSEMBLY USE PART NO. D2471A
IMPELLER PART NO. & SIZE:
SUP-2A 4 1/2" (MODULAR, SPEEDER, SUPER W & R)
SUP-9A 5" (ADMIRAL WASH, CLIPPER/MASTER/CENTURY PW)

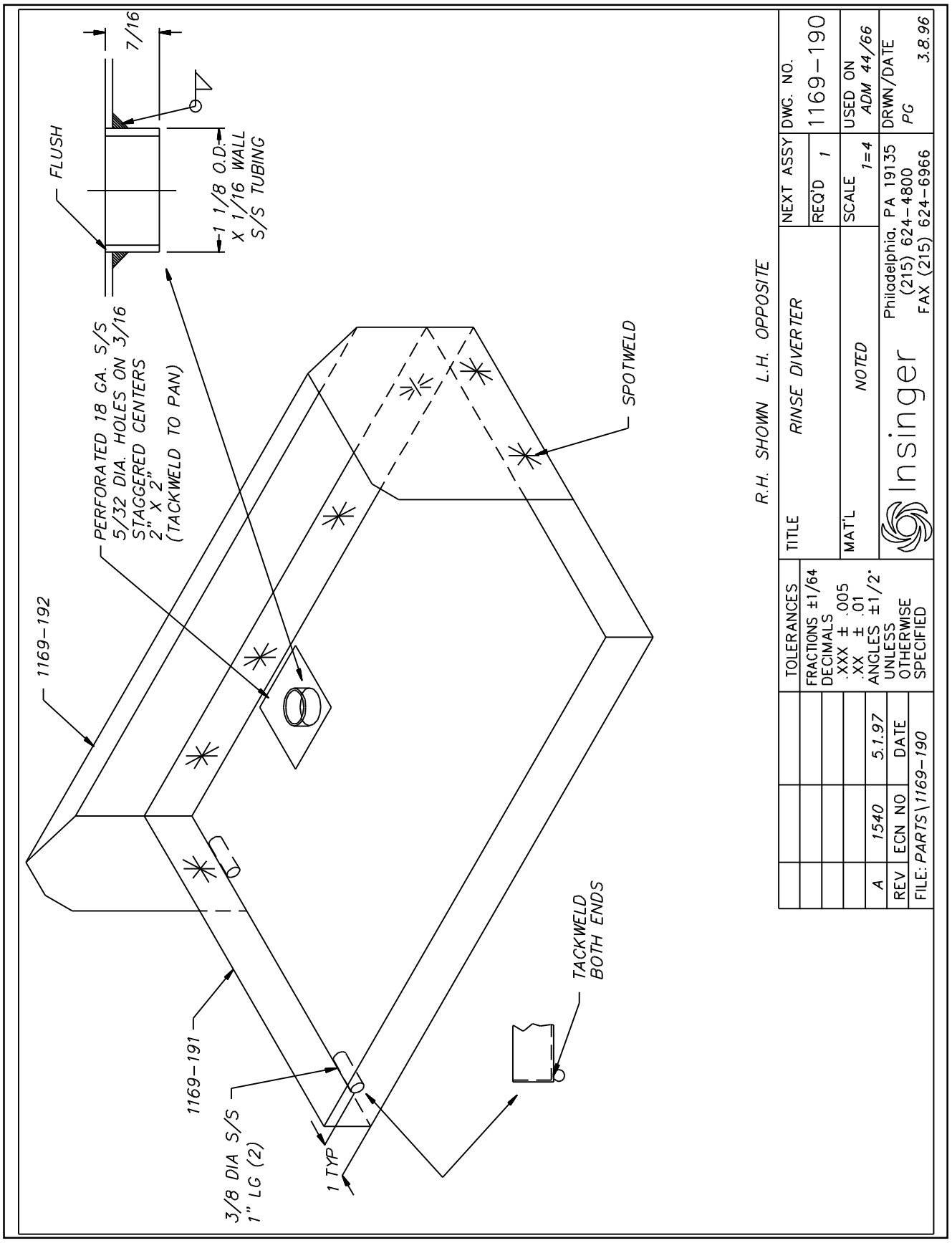
TOLERANCES	TITLE	NEXT ASSY	DWG. NO.
FRACTIONS ±1/64 DECIMALS XXX ± .005 XX ± .01 ANGLES ±1/2° UNLESS OTHERWISE SPECIFIED	PUMP ASSEMBLY MODEL 2 1/2 SUP	REQ'D 1	SK-2456A
	MAT'L	SCALE FULL	USED ON
	Insinger Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966		DRWN/DATE PG 8.29.94

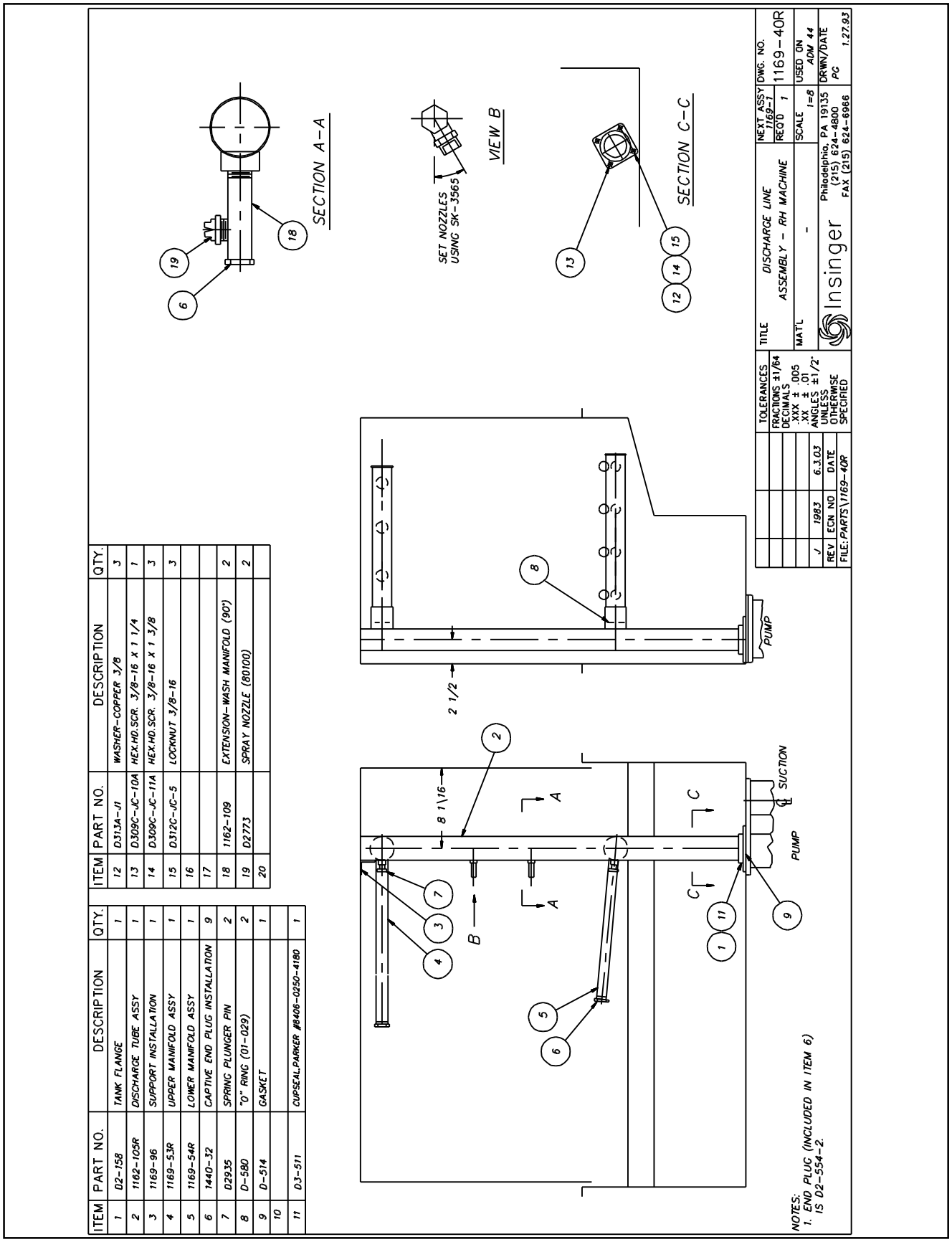
REV	ECN NO	DATE
A	965	11.12.93

FILE: SKETCH\SK-2456A


ITEM | PART NO. | DESCRIPTION | QTY
1 | 1162-16 | CONVEYOR DRIVE SHAFT (Rev F) | 1
2 | 975-55 | SPROCKET | 1
3 | D302-4 | #11 WOODRUFF KEY S/S | 2
4 | D2-525 | WASHER, NYLON (1 3/8 X 7/8 X 1/8) | 2
5 | D-311-1 | COTTER PIN S/S 1/8 x 1 1/2 | 1
6 | 1162-110 | BEARING BRACKET | 2
7 | D312C-HC-5 | LOCKNUT 5/16-18 | 8
8 | D2-585 | "O" RING (01-115) | 1
9 | D309C-CH-3H | SET SCREW S/S 5/16-18 x 3/8 | 1
10 | D309C-HC-7A | HEX HD SCREW S/S 5/16-18 X 1 3/8 | 8
11 | 1528-5 | RACK EJECTOR PADDLE | 1
12 | D313C-H1 | WASHER, PLAIN 5/16 | 8
13 | D309C-GC-22A | HEX HD SCREW S/S 1/4-20 X 2 3/4 | 1
14 | D312C-GC-5 | LOCKNUT 1/4-20 | 1
RH SHOWN - LH OPPOSITE
20 7/8
25 7/8 INSIDE TANK
5
FRONT
1 5/16 ±1/32
3 7/16 REF.
RINSE END
D 1996 9.19.03
C 1905 11.08.01
B 1783 8.3.00
A 1591 1.28.98
REV ECN NO DATE
FILE: PARTS\1162-111
TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
CONVEYOR DRIVE SHAFT ASSEMBLY
MAT'L
NOTED
NEXT ASSY
REQ'D NOTED
SCALE 1/2
DWG. NO. 1162-111
USED ON ADM/SPDR
DRWN/DATE PG 8.29.97
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966

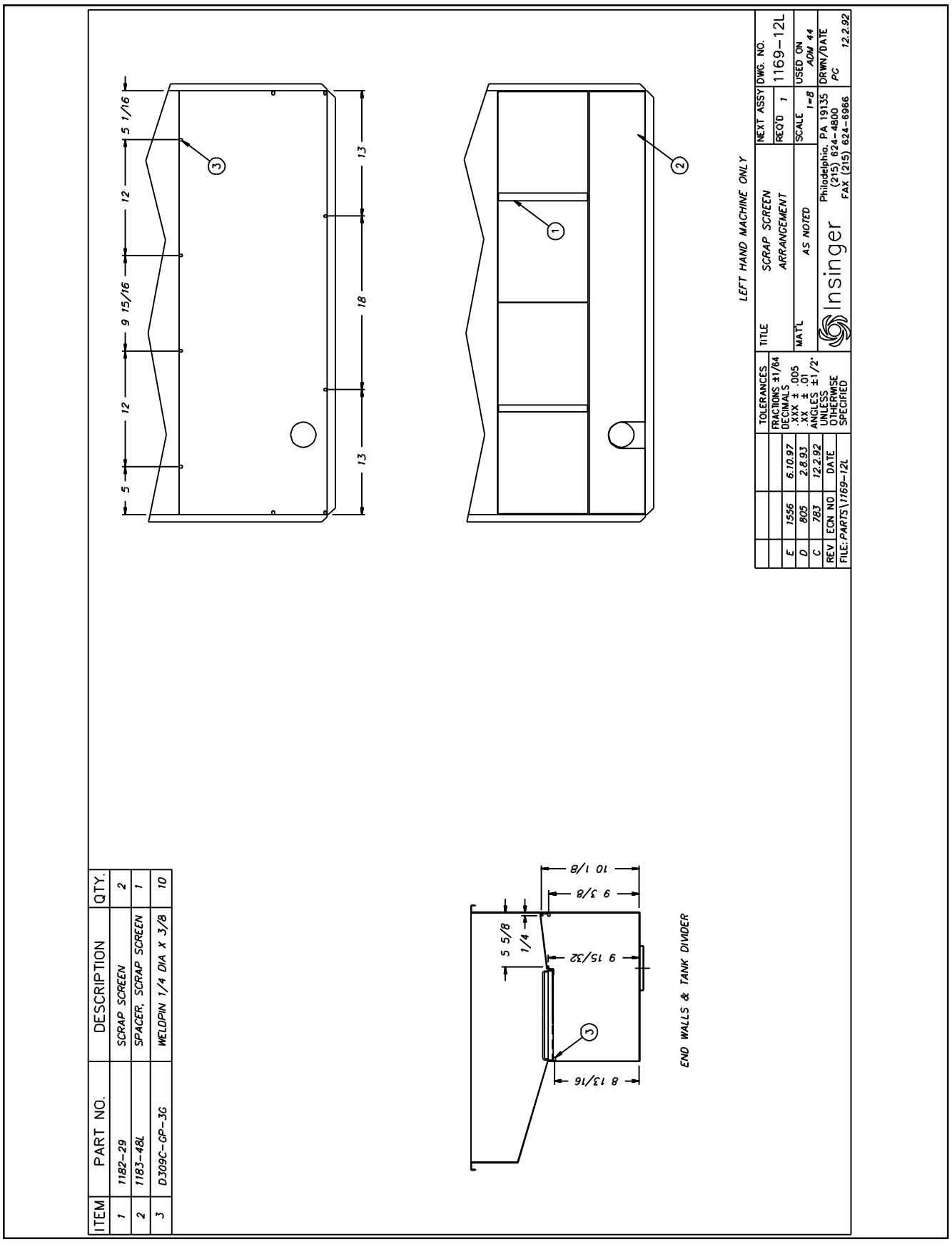

ITEM | PART NO. | DESCRIPTION | QTY.
1 | 1169-160 | FRAME (5/8 DIA HOLES) | 1
2 | 1169-199 | YOKE (SHEET METAL) | 1
3 | 1169-162 | ADJUSTMENT SCREW | 2
4 | D3-549 | RUBBER GROMMET 5/16 ID | 2
5 | D313C-H1 | FLAT WASHER 5/16 | 4
6 | 1169-189 | SHAFT | 1
7 | - | - | -
8 | D309C-EF-4C | WELD STUD #10-32 x 1/2 | 2
9 | D312C-EF-5 | SEAL NUT #10-32 | 3
10 | D312C-HC-2 | HEX NUT 5/16-18 | 4
11 | D2857 | SPROCKET (UHMW) | 1
12 | D2858 | HUB SPACER 1 1/16 LG | 1
13 | - | - | -
14 | D2-525 | WASHER | 3
15 | D309C-EF-6G | WELDSTUD #10-32 x 3/4 | 1
NOTES:
1. THESE DIMENSIONS LOCATE THE CENTERS OF (2) 9/16 DIA HOLES TO BE DRILLED THRU SIDE OF MACHINE.
2. SEE SK-3875 FOR RETRO-FIT
3. BE SURE SPROCKET IS ALIGNED WITH TRACK BEFORE INSTALLING CHAIN. RE-POSITION WASHERS (ITEM #14) IF NECESSARY.
USED ON:
ADMIRAL 44 & 66-3
SPEEDER 64 & 86-3
R.H. SHOWN, L.H. OPPOSITE
SECTION A-A
FULL SIZE
DO NOT COMPRESS GROMMET
FRONT OF MACHINE
LOAD END
7/8 REF.
SEE NOTE 1.
13 1/2
3 9/32
1 1/8
2 3/16
F 1764 5.31.00
E 1576 9.18.97
D 1427 6.6.96
C 1382 2.19.96
REV ECN NO DATE
FILE: PARTS\1169-159
TOLERANCES
FRACTIONS ±1/64
DECIMALS
XXX ± .005
XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
CHAIN TENSIONER ASSEMBLY
MAT'L
-
SCALE 1:2
NEXT ASSY
REQ'D 1
DWG. NO.
1169-159
USED ON
SEE ABOVE
DRWN/DATE
MAM 11.11.94
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966


7/16
FLUSH
1 1/8 O.D.
X 1/16 WALL
S/S TUBING
PERFORATED 18 GA. S/S
5/32 DIA. HOLES ON 3/16
STAGGERED CENTERS
2" X 2"
(TACKWELD TO PAN)
SPOTWELD
1169-192
1169-191
3/8 DIA S/S
1" LG (2)
1 TYP
TACKWELD
BOTH ENDS
R.H. SHOWN L.H. OPPOSITE
TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS
OTHERWISE
SPECIFIED
TITLE
RINSE DIVERTER
MAT'L
NOTED
NEXT ASSY
REQ'D 1
SCALE 1=4
DWG. NO. 1169-190
USED ON ADM 44/66
DRWN/DATE PG 3.8.96
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
A 1540 5.1.97
REV ECN NO DATE
FILE: PARTS\1169-190

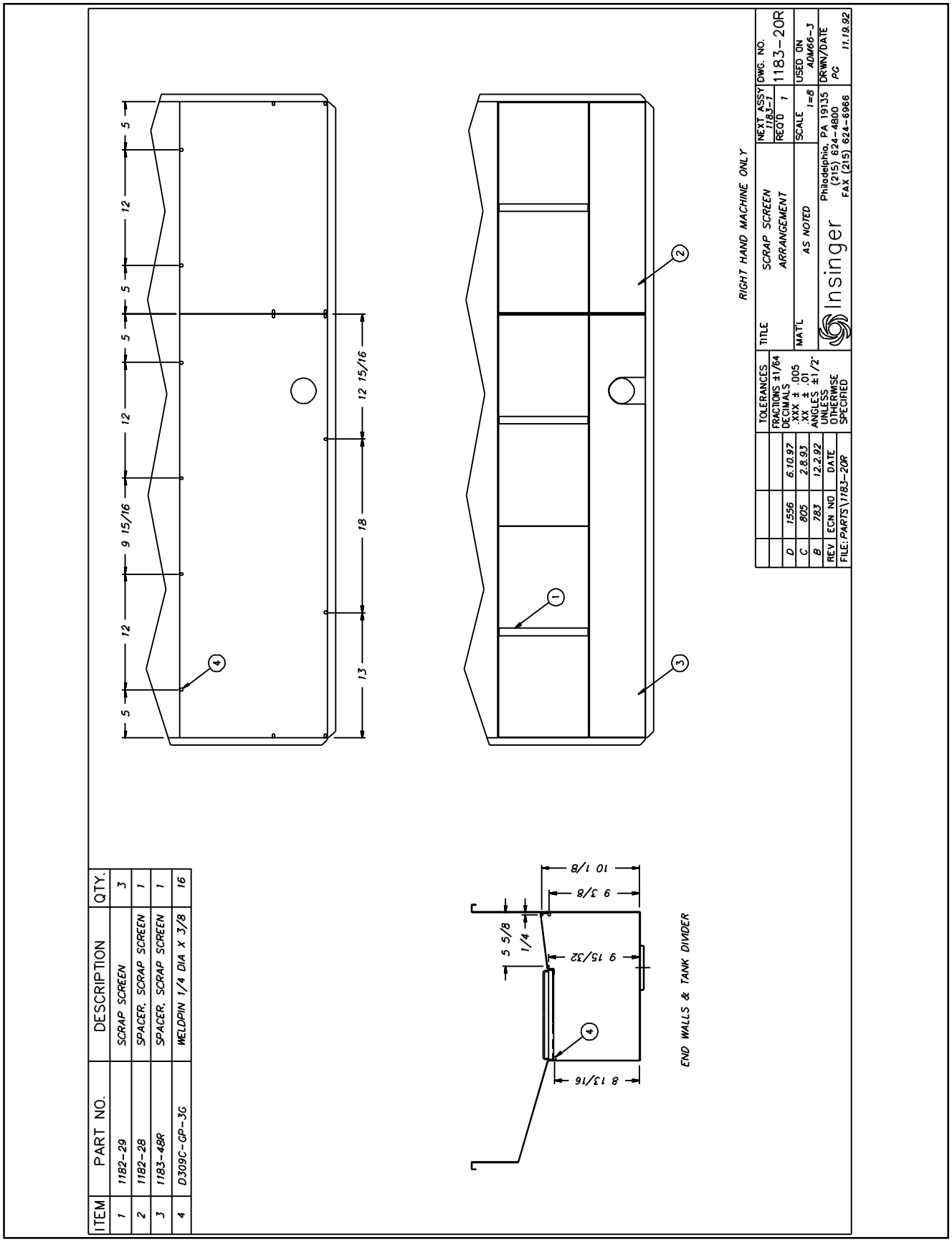


ITEM	PART NO.	DESCRIPTION	QTY.
1	D2-158	TANK FLANGE	1
2	1162-105R	DISCHARGE TUBE ASSY	1
3	1169-96	SUPPORT INSTALLATION	1
4	1169-53R	UPPER MANIFOLD ASSY	1
5	1169-54R	LOWER MANIFOLD ASSY	1
6	1440-32	CAPTIVE END PLUG INSTALLATION	9
7	D2935	SPRING PLUNGER PIN	2
8	D-580	"O" RING (01-029)	2
9	D-514	GASKET	1
10			
11	D3-511	CUPSEAL,PARKER #8406-0250-4180	1

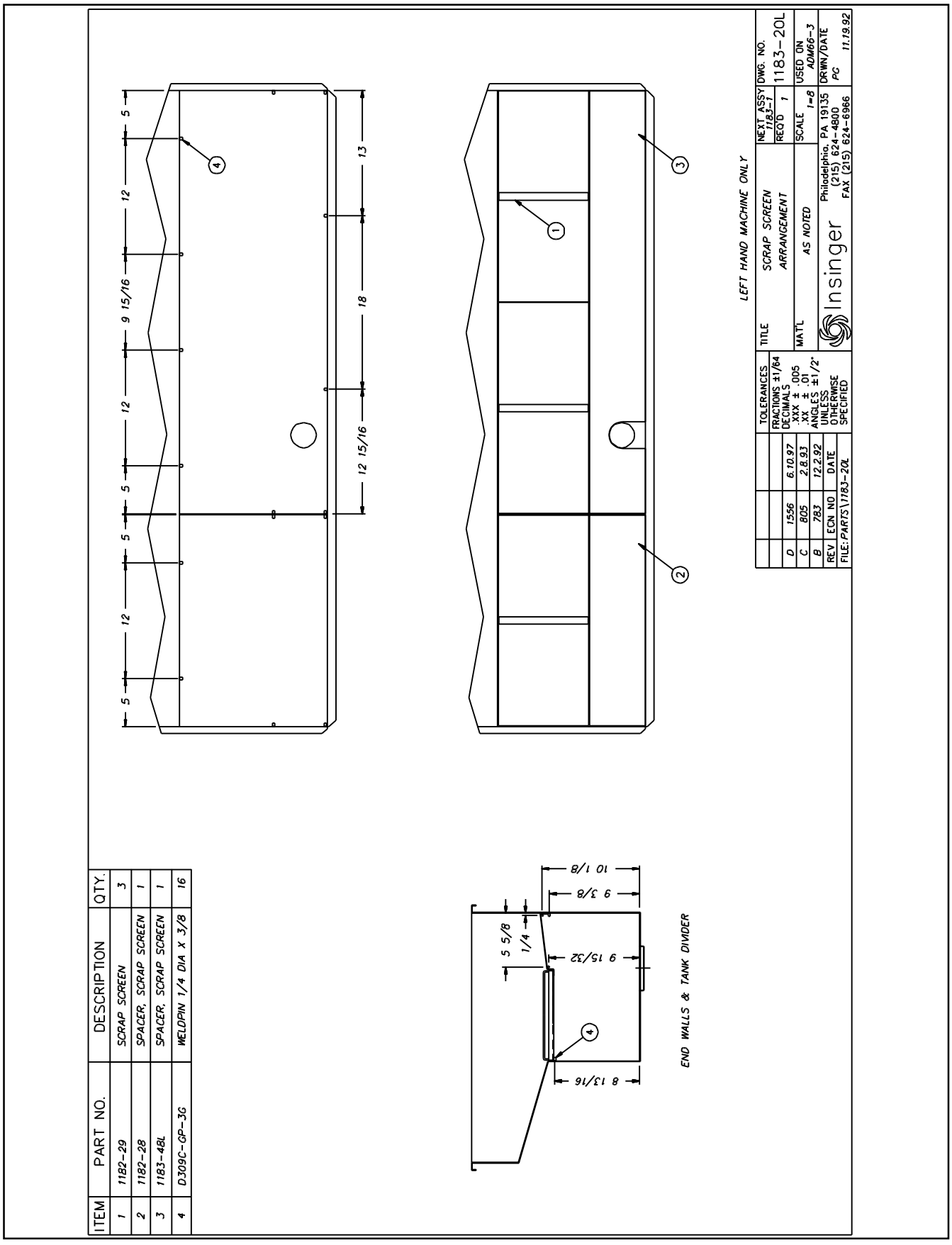
ITEM	PART NO.	DESCRIPTION	QTY.
12	D313A-J1	WASHER-COPPER 3/8	3
13	D309C-JC-10A	HEX.HD.SCR. 3/8-16 X 1 1/4	1
14	D309C-JC-11A	HEX.HD.SCR. 3/8-16 X 1 3/8	3
15	D312C-JC-5	LOCKNUT 3/8-16	3
16			
17			
18	1162-109	EXTENSION-WASH MANIFOLD (90°)	2
19	D2773	SPRAY NOZZLE (80100)	2
20			

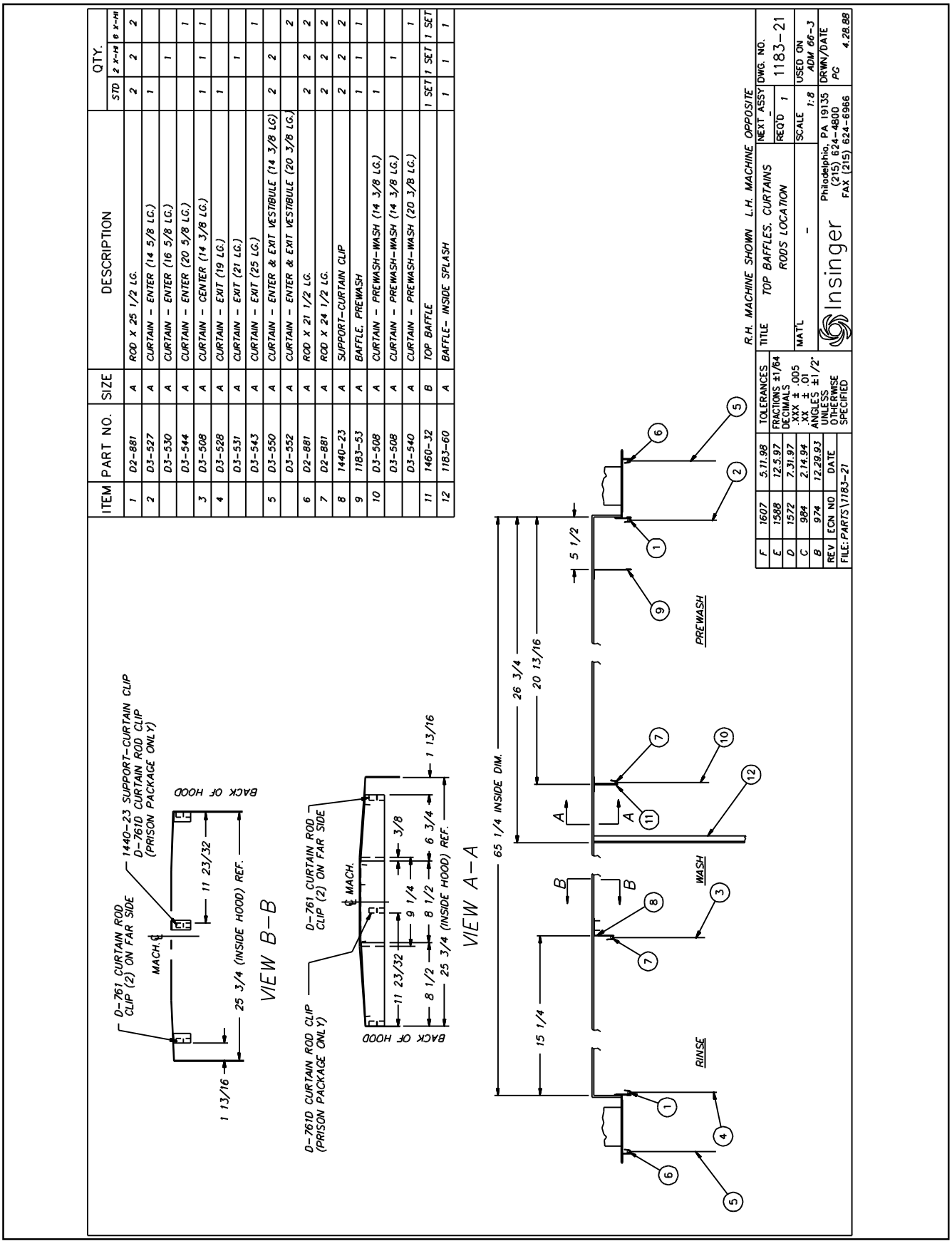


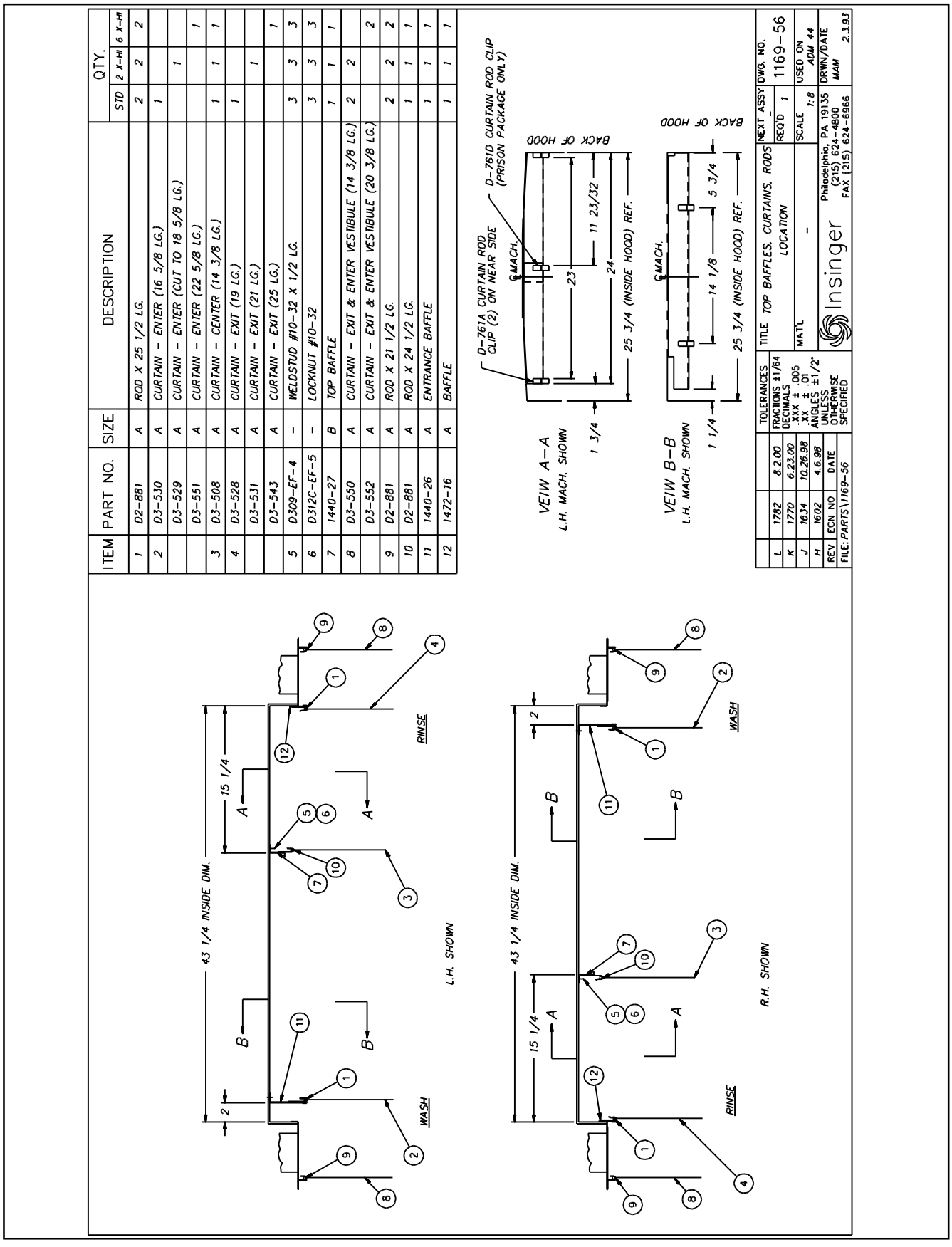
ITEM	PART NO.	DESCRIPTION	QTY.
1	1182-29	SCRAP SCREEN	2
2	1183-48L	SPACER, SCRAP SCREEN	1
3	D309C-GP-3G	WELDPIN 1/4 DIA X 3/8	10


RIGHT HAND MACHINE ONLY
TITLE
SCRAP SCREEN ARRANGEMENT
NEXT ASSY 1183-7 REQ'D 1
DWG. NO. 1183-20R
MAT'L AS NOTED
SCALE 1=8
USED ON ADM66-3
Insinger Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966
DRWN/DATE PC 11.19.92
TOLERANCES FRACTIONS ±1/64 DECIMALS .XXX ± .005 .XX ± .01 ANGLES ±1/2° UNLESS OTHERWISE SPECIFIED
REV ECN NO. DATE
D 1556 6.10.97
C 805 2.8.93
B 783 12.2.92
FILE: PARTS\1183-20R
5 12 12 9 15/16 12 5 5 12 5
12 15/16 18 13
10 1/8 9 3/8 5 5/8 1/4 9 15/32 8 13/16
END WALLS & TANK DIVIDER

ITEM	PART NO.	DESCRIPTION	QTY.
1	1182-29	SCRAP SCREEN	3
2	1182-28	SPACER, SCRAP SCREEN	1
3	1183-48R	SPACER, SCRAP SCREEN	1
4	D309C-GP-3G	WELDPIN 1/4 DIA X 3/8	16


LEFT HAND MACHINE ONLY
END WALLS & TANK DIVIDER
5 5/8
1/4
9 15/32
8 13/16
9 3/8
10 1/8
5
12
5
12
5
9 15/16
12
5
13
18
12 15/16
1
2
3
4
ITEM | PART NO. | DESCRIPTION | QTY.
1 | 1182-29 | SCRAP SCREEN | 3
2 | 1182-28 | SPACER, SCRAP SCREEN | 1
3 | 1183-48L | SPACER, SCRAP SCREEN | 1
4 | D309C-GP-3G | WELDPIN 1/4 DIA X 3/8 | 16
REV | ECN NO | DATE
D | 1556 | 6.10.97
C | 805 | 2.8.93
B | 783 | 12.2.92
FILE: PARTS\1183-20L
TOLERANCES
FRACTIONS ±1/64
DECIMALS .XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
SCRAP SCREEN ARRANGEMENT
MATL
AS NOTED
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
NEXT ASSY 1183-7
REQ'D 1
SCALE 1=8
DWG. NO. 1183-20L
USED ON ADM66-3
DRWN/DATE PC 11.19.92


ITEM | PART NO. | SIZE | DESCRIPTION | QTY. STD | 2 X-M | 6 X-M
1 | D2-881 | A | ROD X 25 1/2 LG. | 2 | 2 | 2
2 | D3-527 | A | CURTAIN - ENTER (14 5/8 LG.) | 1 | | 2
D3-530 | A | CURTAIN - ENTER (16 5/8 LG.) | | 1 |
D3-544 | A | CURTAIN - ENTER (20 5/8 LG.) | | | 1
3 | D3-508 | A | CURTAIN - CENTER (14 3/8 LG.) | 1 | 1 | 1
4 | D3-528 | A | CURTAIN - EXIT (19 LG.) | 1 | | 2
D3-531 | A | CURTAIN - EXIT (21 LG.) | | 1 |
D3-543 | A | CURTAIN - EXIT (25 LG.) | | | 1
5 | D3-550 | A | CURTAIN - ENTER & EXIT VESTIBULE (14 3/8 LG) | 2 | 2 |
D3-552 | A | CURTAIN - ENTER & EXIT VESTIBULE (20 3/8 LG.) | | | 2
6 | D2-881 | A | ROD X 21 1/2 LG. | 2 | 2 | 2
7 | D2-881 | A | ROD X 24 1/2 LG. | 2 | 2 | 2
8 | 1440-23 | A | SUPPORT-CURTAIN CLIP | 2 | 2 | 2
9 | 1183-53 | A | BAFFLE, PREWASH | 1 | 1 | 1
10 | D3-508 | A | CURTAIN - PREWASH-WASH (14 3/8 LG.) | 1 | | 1
D3-508 | A | CURTAIN - PREWASH-WASH (14 3/8 LG.) | | 1 |
D3-540 | A | CURTAIN - PREWASH-WASH (20 3/8 LG.) | | | 1
11 | 1460-32 | B | TOP BAFFLE | 1 SET | 1 SET | 1 SET
12 | 1183-60 | A | BAFFLE- INSIDE SPLASH | 1 | 1 | 1
R.H. MACHINE SHOWN L.H. MACHINE OPPOSITE
F 1607 5.11.98
E 1588 12.5.97
D 1572 7.31.97
C 984 2.14.94
B 974 12.29.93
REV ECN NO DATE
FILE: PARTS\1183-21
TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE TOP BAFFLES, CURTAINS RODS LOCATION
MAT'L -
NEXT ASSY
REQ'D 1
SCALE 1:8
DWG. NO. 1183-21
USED ON ADM 66-J
DRWN/DATE PG 4.28.88
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
VIEW B-B
1440-23 SUPPORT-CURTAIN CLIP
D-761D CURTAIN ROD CLIP
(PRISON PACKAGE ONLY)
D-761 CURTAIN ROD CLIP (2) ON FAR SIDE
MACH. ℄
11 23/32
25 3/4 (INSIDE HOOD) REF.
1 13/16
BACK OF HOOD
VIEW A-A
D-761 CURTAIN ROD CLIP (2) ON FAR SIDE
D-761D CURTAIN ROD CLIP (PRISON PACKAGE ONLY)
MACH. ℄
3/8
9 1/4
8 1/2
6 3/4
1 13/16
11 23/32
8 1/2
25 3/4 (INSIDE HOOD) REF.
BACK OF HOOD
65 1/4 INSIDE DIM.
26 3/4
20 13/16
5 1/2
15 1/4
PREWASH
WASH
RINSE



ITEM	PART NO.	SIZE	DESCRIPTION	QTY. STD	QTY. 2 X-HI	QTY. 6 X-HI
1	02-881	A	ROD X 25 1/2 LG.	2	2	2
2	03-530	A	CURTAIN - ENTER (16 5/8 LG.)	1		
	03-529	A	CURTAIN - ENTER (CUT TO 18 5/8 LG.)		1	
	03-551	A	CURTAIN - ENTER (22 5/8 LG.)			1
3	03-508	A	CURTAIN - CENTER (14 3/8 LG.)	1	1	1
4	03-528	A	CURTAIN - EXIT (19 LG.)	1		
	03-531	A	CURTAIN - EXIT (21 LG.)		1	
	03-543	A	CURTAIN - EXIT (25 LG.)			1
5	0309-EF-4	-	WELDSTUD #10-32 X 1/2 LG.	3	3	3
6	0312C-EF-5	-	LOCKNUT #10-32	3	3	3
7	1440-27	B	TOP BAFFLE	1	1	1
8	03-550	A	CURTAIN - EXIT & ENTER VESTIBULE (14 3/8 LG.)	2	2	
	03-552	A	CURTAIN - EXIT & ENTER VESTIBULE (20 3/8 LG.)			2
9	02-881	A	ROD X 21 1/2 LG.	2	2	2
10	02-881	A	ROD X 24 1/2 LG.	1	1	1
11	1440-26	A	ENTRANCE BAFFLE	1	1	1
12	1472-16	A	BAFFLE	1	1	1

			TOLERANCES
L	1782	8.2.00	FRACTIONS ±1/64
K	1770	6.23.00	DECIMALS .XXX ± .005
J	1634	10.26.98	.XX ± .01
H	1602	4.6.98	ANGLES ±1/2°
REV	ECN NO	DATE	UNLESS OTHERWISE SPECIFIED

FILE: PARTS\1169-56

TITLE TOP BAFFLES, CURTAINS, RODS LOCATION

MATL -

NEXT ASSY _ REQ'D 1

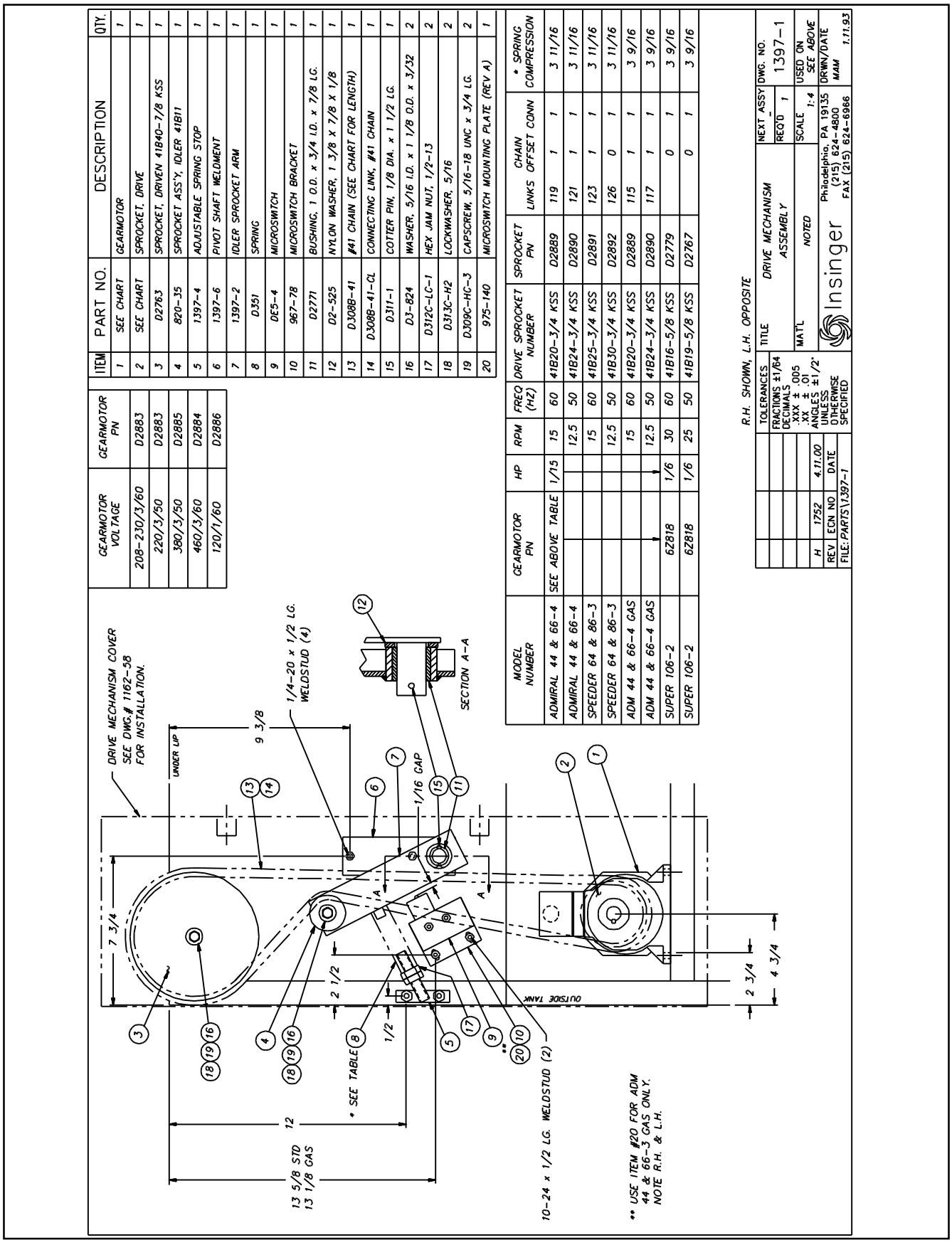
SCALE 1:8

DWG. NO. 1169-56

USED ON ADM 44

DRWN/DATE MAM 2.3.93

Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966



ITEM	PART NO.	DESCRIPTION	QTY.
1	SEE CHART	GEARMOTOR	1
2	SEE CHART	SPROCKET, DRIVE	1
3	D2763	SPROCKET, DRIVEN 41B40-7/8 KSS	1
4	820-35	SPROCKET ASS'Y, IDLER 41B11	1
5	1397-4	ADJUSTABLE SPRING STOP	1
6	1397-6	PIVOT SHAFT WELDMENT	1
7	1397-2	IDLER SPROCKET ARM	1
8	D351	SPRING	1
9	DE5-4	MICROSWITCH	1
10	967-78	MICROSWITCH BRACKET	1
11	D2771	BUSHING, 1 O.D. x 3/4 I.D. x 7/8 LG.	1
12	D2-525	NYLON WASHER, 1 3/8 x 7/8 x 1/8	1
13	D308B-41	#41 CHAIN (SEE CHART FOR LENGTH)	1
14	D308B-41-CL	CONNECTING LINK, #41 CHAIN	1
15	D311-1	COTTER PIN, 1/8 DIA. x 1 1/2 LG.	1
16	D3-824	WASHER, 5/16 I.D. x 1 1/8 O.D. x 3/32	2
17	D312C-LC-1	HEX JAM NUT, 1/2-13	2
18	D313C-H2	LOCKWASHER, 5/16	2
19	D309C-HC-3	CAPSCREW, 5/16-18 UNC x 3/4 LG.	2
20	975-140	MICROSWITCH MOUNTING PLATE (REV A)	1

GEARMOTOR VOLTAGE	GEARMOTOR PN
208-230/3/60	D2883
220/3/50	D2883
380/3/50	D2885
460/3/60	D2884
120/1/60	D2886

MODEL NUMBER	GEARMOTOR PN	HP	RPM	FREQ (HZ)	DRIVE SPROCKET NUMBER	SPROCKET PN	CHAIN LINKS OFFSET CONN	* SPRING COMPRESSION
ADMIRAL 44 & 66-4	SEE ABOVE TABLE	1/15	15	60	41B20-3/4 KSS	D2889	119 1 1	3 11/16
ADMIRAL 44 & 66-4			12.5	50	41B24-3/4 KSS	D2890	121 1 1	3 11/16
SPEEDER 64 & 86-3			15	60	41B25-3/4 KSS	D2891	123 1 1	3 11/16
SPEEDER 64 & 86-3			12.5	50	41B30-3/4 KSS	D2892	126 0 1	3 11/16
ADM 44 & 66-4 GAS			15	60	41B20-3/4 KSS	D2889	115 1 1	3 9/16
ADM 44 & 66-4 GAS			12.5	50	41B24-3/4 KSS	D2890	117 1 1	3 9/16
SUPER 106-2	62818	1/6	30	60	41B16-5/8 KSS	D2779	0 1	3 9/16
SUPER 106-2	62818	1/6	25	50	41B19-5/8 KSS	D2767	0 1	3 9/16

H	1752	4.11.00		
REV	ECN NO	DATE		

TOLERANCES: FRACTIONS ±1/64, DECIMALS .XXX ± .005, .XX ± .01, ANGLES ±1/2°, UNLESS OTHERWISE SPECIFIED

TITLE: DRIVE MECHANISM ASSEMBLY

MATL: NOTED

SCALE: 1:4

NEXT ASSY: USED ON SEE ABOVE

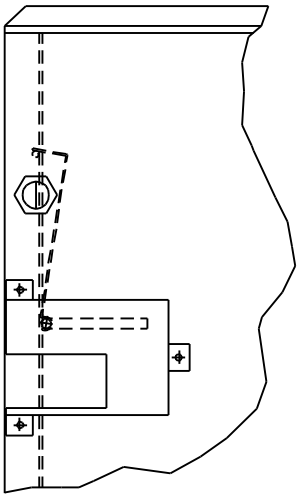
REQ'D: 1

DWG. NO.: 1397-1

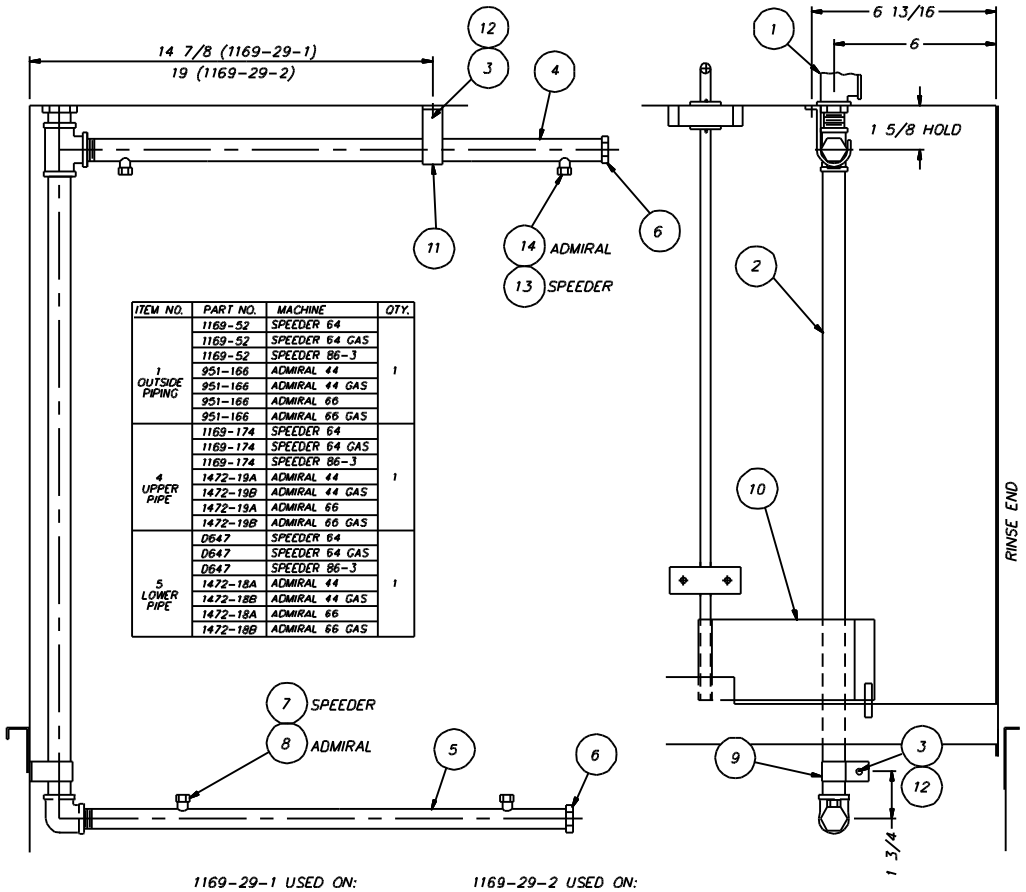
DRWN/DATE: MAM 1.11.93

Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966

FILE: PARTS\1397-1



ITEM	PART NO.	DESCRIPTION	-1 QTY.	-2 QTY.
1	SEE TABULATION	PIPING ASSY (OUTSIDE)	*	*
2	1169-45	PIPING ASSY (INSIDE)	1	1
3	D309C-EF-3G	WELDSTUD 10-32 x 3/8	2	2
4	SEE TABULATION	SPRAY PIPE, UPPER	*	*
5	SEE TABULATION	SPRAY PIPE, LOWER	*	*
6	D2-554-2	PLUG 3/4-10 UNC-2A	2	2
7	D2286 (SPEEDER)	SPRAY NOZZLE 8010	3	-
8	D2853 (ADMIRAL)	SPRAY NOZZLE 5006	4	4
9	D2-789	CLAMP	1	1
10	1169-145	LEVER ASSY	1	1
11	D3-821	BRACKET	1	1
12	D312C-EF-5	LOCKNUT	2	2
13	D2698 (SPEEDER)	SPRAY NOZZLE 1504	6	-
14	D2856 (ADMIRAL)	SPRAY NOZZLE 5008	3	3



ITEM NO.	PART NO.	MACHINE	QTY.
1 OUTSIDE PIPING	1169-52	SPEEDER 64	1
	1169-52	SPEEDER 64 GAS	
	1169-52	SPEEDER 86-3	
	951-166	ADMIRAL 44	
	951-166	ADMIRAL 44 GAS	
	951-166	ADMIRAL 66	
	951-166	ADMIRAL 66 GAS	
4 UPPER PIPE	1169-174	SPEEDER 64	1
	1169-174	SPEEDER 64 GAS	
	1169-174	SPEEDER 86-3	
	1472-19A	ADMIRAL 44	
	1472-19B	ADMIRAL 44 GAS	
	1472-19A	ADMIRAL 66	
	1472-19B	ADMIRAL 66 GAS	
5 LOWER PIPE	0647	SPEEDER 64	1
	0647	SPEEDER 64 GAS	
	0647	SPEEDER 86-3	
	1472-18A	ADMIRAL 44	
	1472-18B	ADMIRAL 44 GAS	
	1472-18A	ADMIRAL 66	
	1472-18B	ADMIRAL 66 GAS	

1169-29-1 USED ON:
ADM 44 & 66-3
SPDR 64
SPDR 64 GAS
SPDR 86-3

1169-29-2 USED ON:
ADM 44 GAS
ADM 66-3 GAS

L.H. SHOWN - R.H. OPPOSITE

1169-29

P	1970	2.27.03	
N	1655	2.10.99	
REV	ECN NO	DATE	
FILE: PARTS\1169-29			

TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED

TITLE: FINAL RINSE ASSEMBLY
MAT'L: -
NEXT ASSY: -
REQ'D: 1
SCALE: 1:4
DWG. NO.: 1169-29
USED ON: SEE ABOVE
DRWN/DATE: MAM 12.14.94

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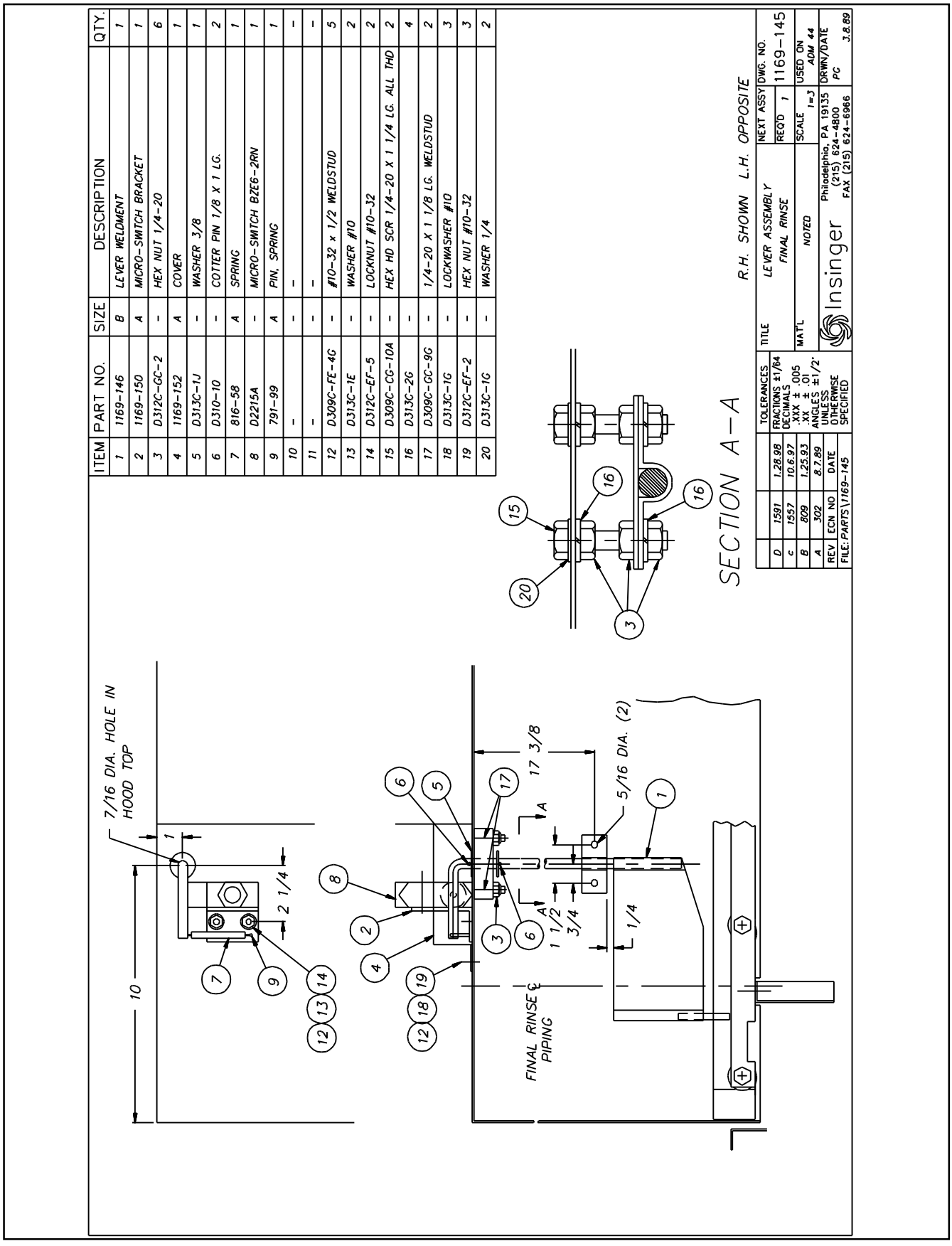
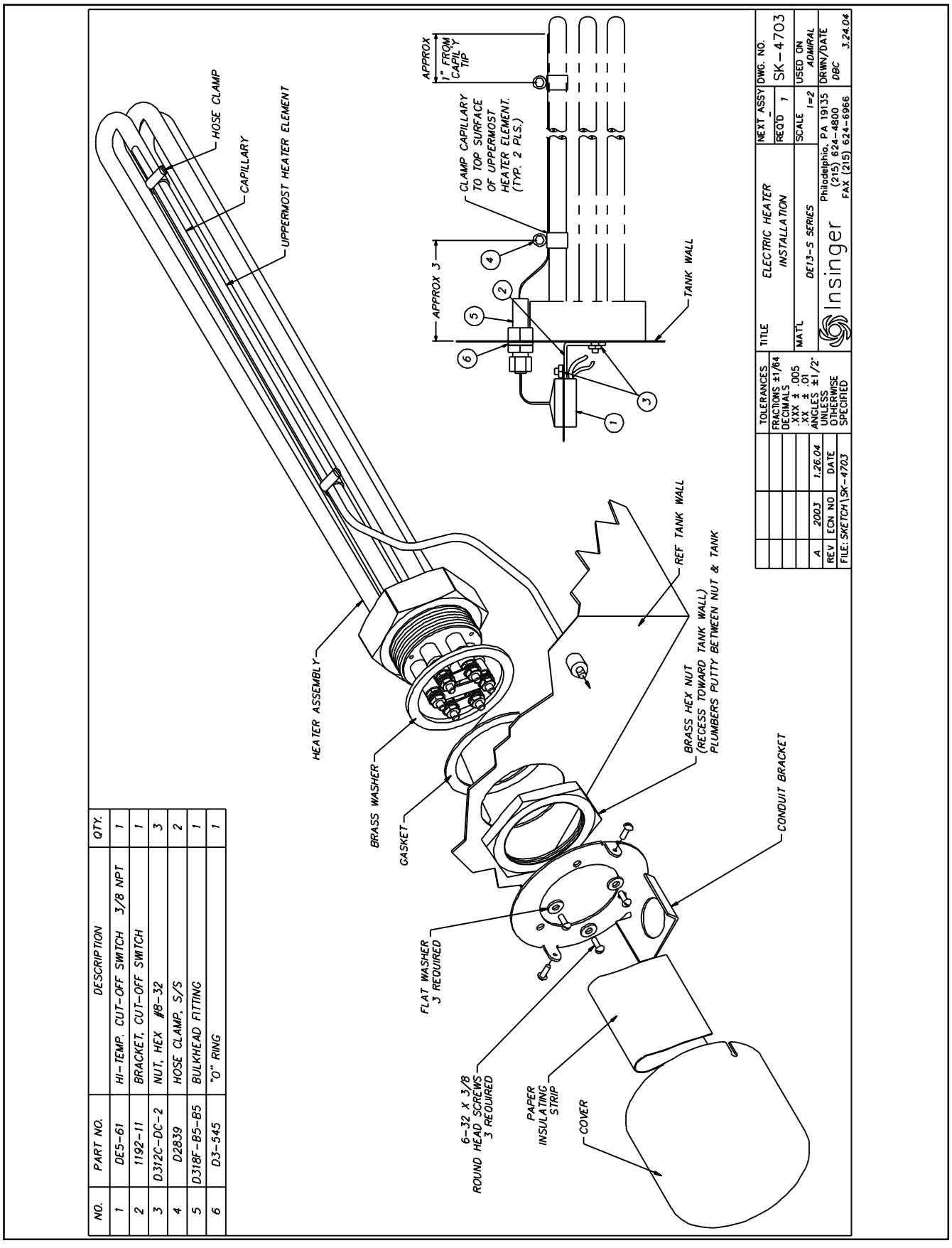
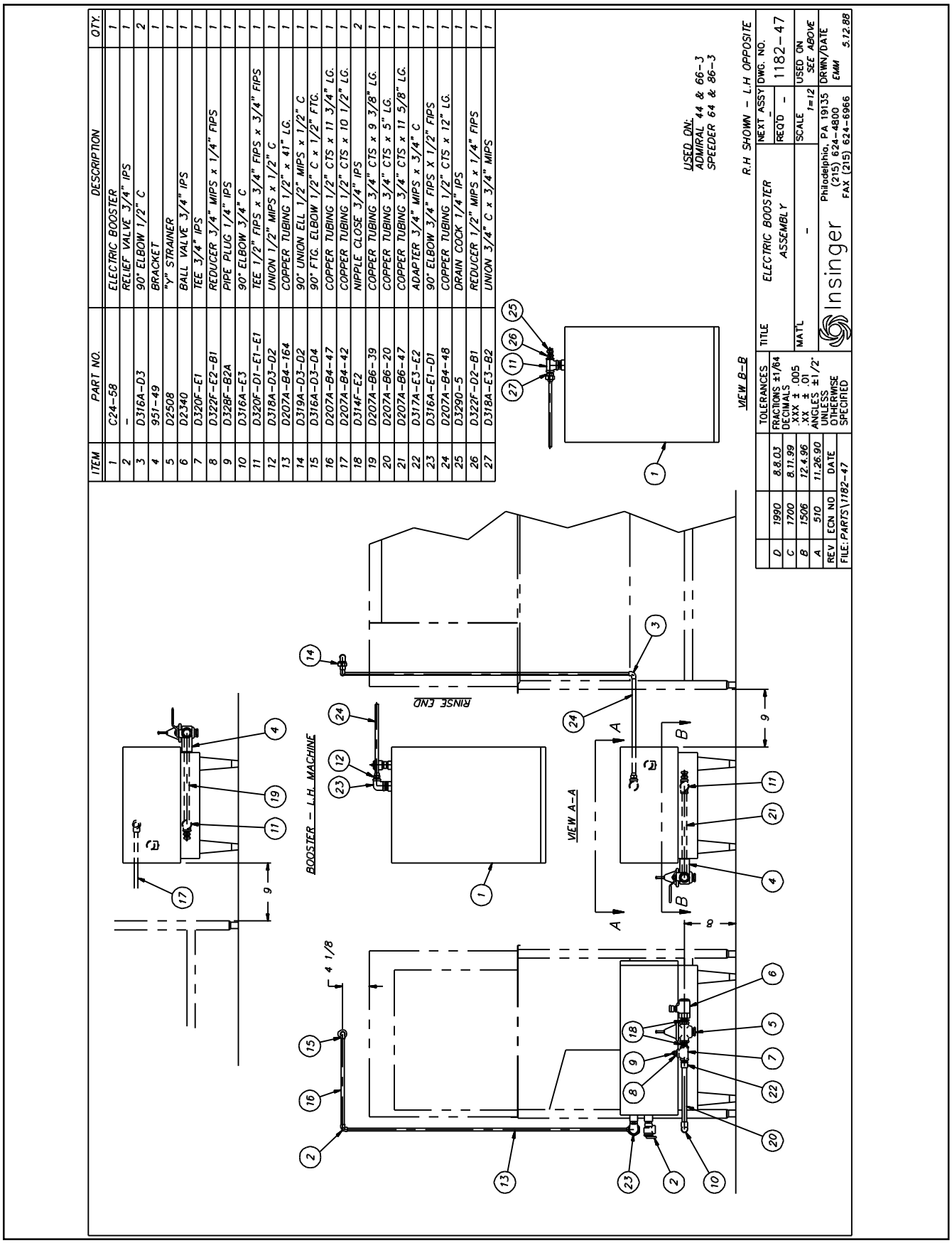
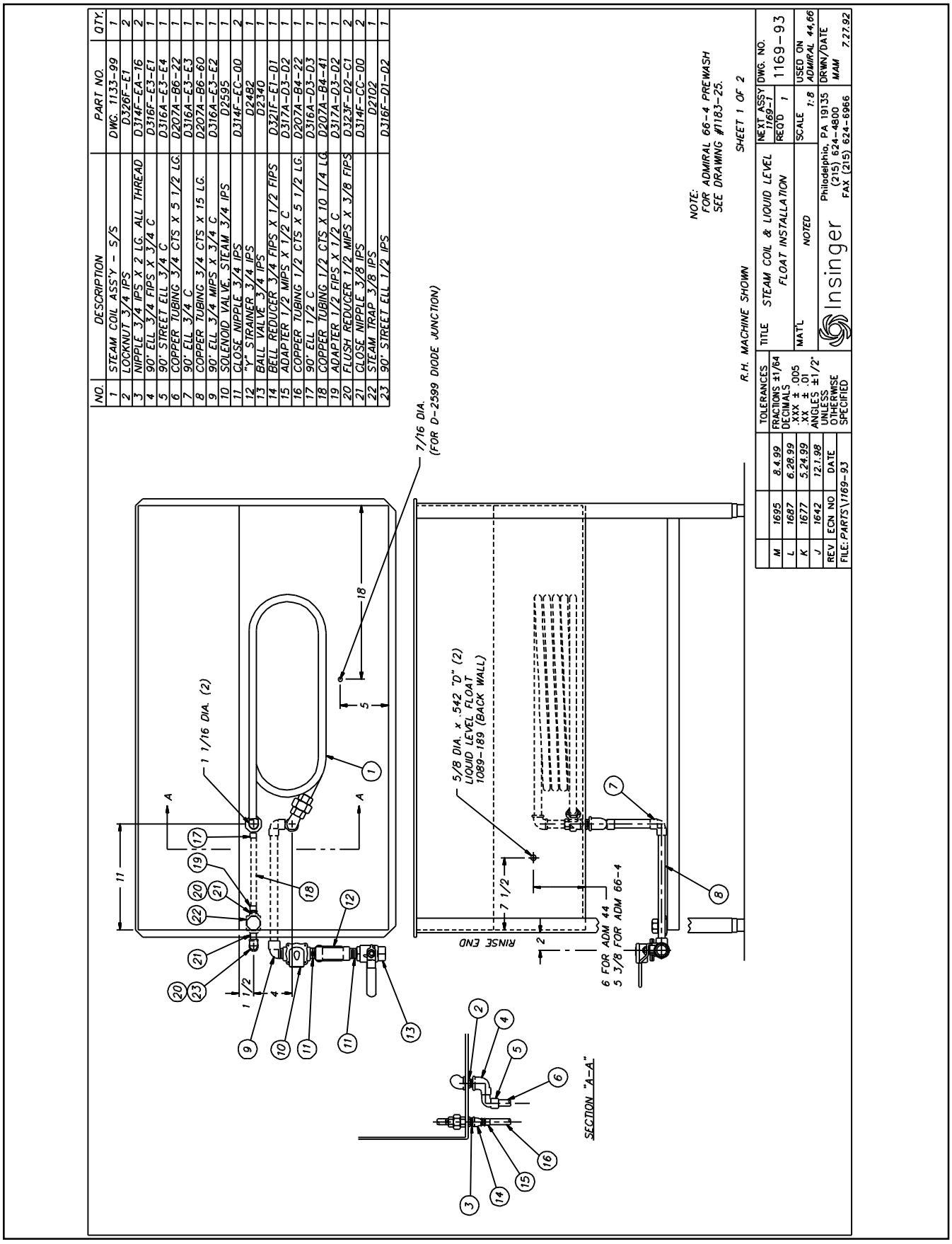
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966


ITEM | PART NO. | SIZE | DESCRIPTION | QTY.
1 | 1169-146 | B | LEVER WELDMENT | 1
2 | 1169-150 | A | MICRO-SWITCH BRACKET | 1
3 | 0.312C-GC-2 | - | HEX NUT 1/4-20 | 6
4 | 1169-152 | A | COVER | 1
5 | 0.313C-1J | - | WASHER 3/8 | 1
6 | 0.310-10 | - | COTTER PIN 1/8 X 1 LG. | 2
7 | 816-58 | A | SPRING | 1
8 | D2215A | - | MICRO-SWITCH BZE6-2RN | 1
9 | 791-99 | A | PIN, SPRING | 1
10 | - | - | - | -
11 | - | - | - | -
12 | 0.309C-FE-4G | - | #10-32 x 1/2 WELDSTUD | 5
13 | 0.313C-1E | - | WASHER #10 | 2
14 | 0.312C-EF-5 | - | LOCKNUT #10-32 | 2
15 | 0.309C-CG-10A | - | HEX HD SCR 1/4-20 X 1 1/4 LG. ALL THD | 2
16 | 0.313C-2G | - | | 4
17 | 0.309C-GC-9G | - | 1/4-20 X 1 1/8 LG. WELDSTUD | 2
18 | 0.313C-1G | - | LOCKWASHER #10 | 3
19 | 0.312C-EF-2 | - | HEX NUT #10-32 | 3
20 | 0.313C-1C | - | WASHER 1/4 | 2
R.H. SHOWN L.H. OPPOSITE
SECTION A-A
7/16 DIA. HOLE IN HOOD TOP
10
2 1/4
17 3/8
5/16 DIA. (2)
1 1/2
3/4
1/4
FINAL RINSE PIPING
TOLERANCES
FRACTIONS ±1/64
DECIMALS .XXX ± .005 .XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
LEVER ASSEMBLY FINAL RINSE
MATL
NOTED
NEXT ASSY
REQ'D 1
SCALE 1=3
DWG. NO. 1169-145
USED ON ADM 44
DRWN/DATE PC 3.8.89
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
D 1591 1.28.98
C 1557 10.6.97
B 809 1.25.93
A 302 8.7.89
REV ECN NO DATE
FILE: PARTS\1169-145



NO.	PART NO.	DESCRIPTION	QTY.
1	DE5-61	HI-TEMP. CUT-OFF SWITCH 3/8 NPT	1
2	1192-11	BRACKET, CUT-OFF SWITCH	1
3	D312C-DC-2	NUT, HEX #8-32	3
4	D2839	HOSE CLAMP, S/S	2
5	D318F-B5-B5	BULKHEAD FITTING	1
6	D3-545	"O" RING	1


ITEM | PART NO. | DESCRIPTION | QTY.
1 | C24-58 | ELECTRIC BOOSTER | 1
2 | – | RELIEF VALVE 3/4" IPS | 1
3 | D316A-D3 | 90° ELBOW 1/2" C | 2
4 | 951-49 | BRACKET | 1
5 | D2508 | "Y" STRAINER | 1
6 | D2340 | BALL VALVE 3/4" IPS | 1
7 | D320F-E1 | TEE 3/4" IPS | 1
8 | D322F-E2-B1 | REDUCER 3/4" MIPS x 1/4" FIPS | 1
9 | D328F-B2A | PIPE PLUG 1/4" IPS | 1
10 | D316A-E3 | 90° ELBOW 3/4" C | 1
11 | D320F-D1-E1-E1 | TEE 1/2" FIPS x 3/4" FIPS x 3/4" FIPS | 1
12 | D318A-D3-D2 | UNION 1/2" MIPS x 1/2" C | 1
13 | D207A-B4-164 | COPPER TUBING 1/2" x 41" LG. | 1
14 | D319A-D3-D2 | 90° UNION ELL 1/2" MIPS x 1/2" C | 1
15 | D316A-D3-D4 | 90° FTG. ELBOW 1/2" C x 1/2" FTG. | 1
16 | D207A-B4-47 | COPPER TUBING 1/2" CTS x 11 3/4" LG. | 1
17 | D207A-B4-42 | COPPER TUBING 1/2" CTS x 10 1/2" LG. | 1
18 | D314F-E2 | NIPPLE CLOSE 3/4" IPS | 2
19 | D207A-B6-39 | COPPER TUBING 3/4" CTS x 9 3/8" LG. | 1
20 | D207A-B6-20 | COPPER TUBING 3/4" CTS x 5" LG. | 1
21 | D207A-B6-47 | COPPER TUBING 3/4" CTS x 11 5/8" LG. | 1
22 | D317A-E3-E2 | ADAPTER 3/4" MIPS x 3/4" C | 1
23 | D316A-E1-D1 | 90° ELBOW 3/4" FIPS X 1/2" FIPS | 1
24 | D207A-B4-48 | COPPER TUBING 1/2" CTS x 12" LG. | 1
25 | D3290-5 | DRAIN COCK 1/4" IPS | 1
26 | D322F-D2-B1 | REDUCER 1/2" MIPS x 1/4" FIPS | 1
27 | D318A-E3-B2 | UNION 3/4" C x 3/4" MIPS | 1
USED ON:
ADMIRAL 44 & 66-3
SPEEDER 64 & 86-3
R.H SHOWN – L.H OPPOSITE
VIEW B-B
BOOSTER – L.H. MACHINE
VIEW A-A
RINSE END
4 1/8
9
8
REV | ECN NO | DATE
D | 1990 | 8.8.03
C | 1700 | 8.11.99
B | 1506 | 12.4.96
A | 510 | 11.26.90
FILE: PARTS\1182-47
TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
ELECTRIC BOOSTER ASSEMBLY
MATL
–
insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
NEXT ASSY
REQ'D –
SCALE 1=12
DWG. NO.
1182-47
USED ON
SEE ABOVE
DRWN/DATE
EMM 5.12.88



NO.	DESCRIPTION	PART NO.	QTY.
1	STEAM COIL ASS'Y - S/S	DWG. 1133-99	1
2	LOCKNUT 3/4 IPS	D326F-E1	2
3	NIPPLE 3/4 IPS X 2 LG. ALL THREAD	D314F-EA-16	2
4	90° ELL 3/4 FIPS X 3/4 C	D316F-E3-E1	1
5	90° STREET ELL 3/4 C	D316A-E3-E4	1
6	COPPER TUBING 3/4 CTS X 5 1/2 LG.	D207A-B6-22	1
7	90° ELL 3/4 C	D316A-E3-E3	1
8	COPPER TUBING 3/4 CTS X 15 LG.	D207A-B6-60	1
9	90° ELL 3/4 MIPS x 3/4 C	D316A-E3-E2	1
10	SOLENOID VALVE, STEAM 3/4 IPS	D2595	1
11	CLOSE NIPPLE 3/4 IPS	D314F-EC-00	2
12	"Y" STRAINER 3/4 IPS	D2482	1
13	BALL VALVE 3/4 IPS	D2340	1
14	BELL REDUCER 3/4 FIPS X 1/2 FIPS	D321F-E1-D1	1
15	ADAPTER 1/2 MIPS X 1/2 C	D317A-D3-D2	1
16	COPPER TUBING 1/2 CTS X 5 1/2 LG.	D207A-B4-22	1
17	90° ELL 1/2 C	D316A-D3-D3	1
18	COPPER TUBING 1/2 CTS X 10 1/4 LG.	D207A-B4-41	1
19	ADAPTER 1/2 FIPS X 1/2 C	D317A-D3-D2	1
20	FLUSH REDUCER 1/2 MIPS X 3/8 FIPS	D323F-D2-C1	2
21	CLOSE NIPPLE 3/8 IPS	D314F-CC-00	2
22	STEAM TRAP 3/8 IPS	D2102	1
23	90° STREET ELL 1/2 IPS	D316F-D1-D2	1

NOTE:
FOR ADMIRAL 66-4 PREWASH
SEE DRAWING #1183-25.

R.H. MACHINE SHOWN

SHEET 1 OF 2

TOLERANCES	TITLE	STEAM COIL & LIQUID LEVEL FLOAT INSTALLATION
FRACTIONS ±1/64		
DECIMALS		
.XXX ± .005		
.XX ± .01		
ANGLES ±1/2°		
UNLESS OTHERWISE SPECIFIED		

NEXT ASSY	DWG. NO.	
1169-1	1169-93	
REQ'D 1		
SCALE 1:8	USED ON ADMIRAL 44,66	
MATL NOTED		
DRWN/DATE MAM 7.27.92		

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(215) 624-4800
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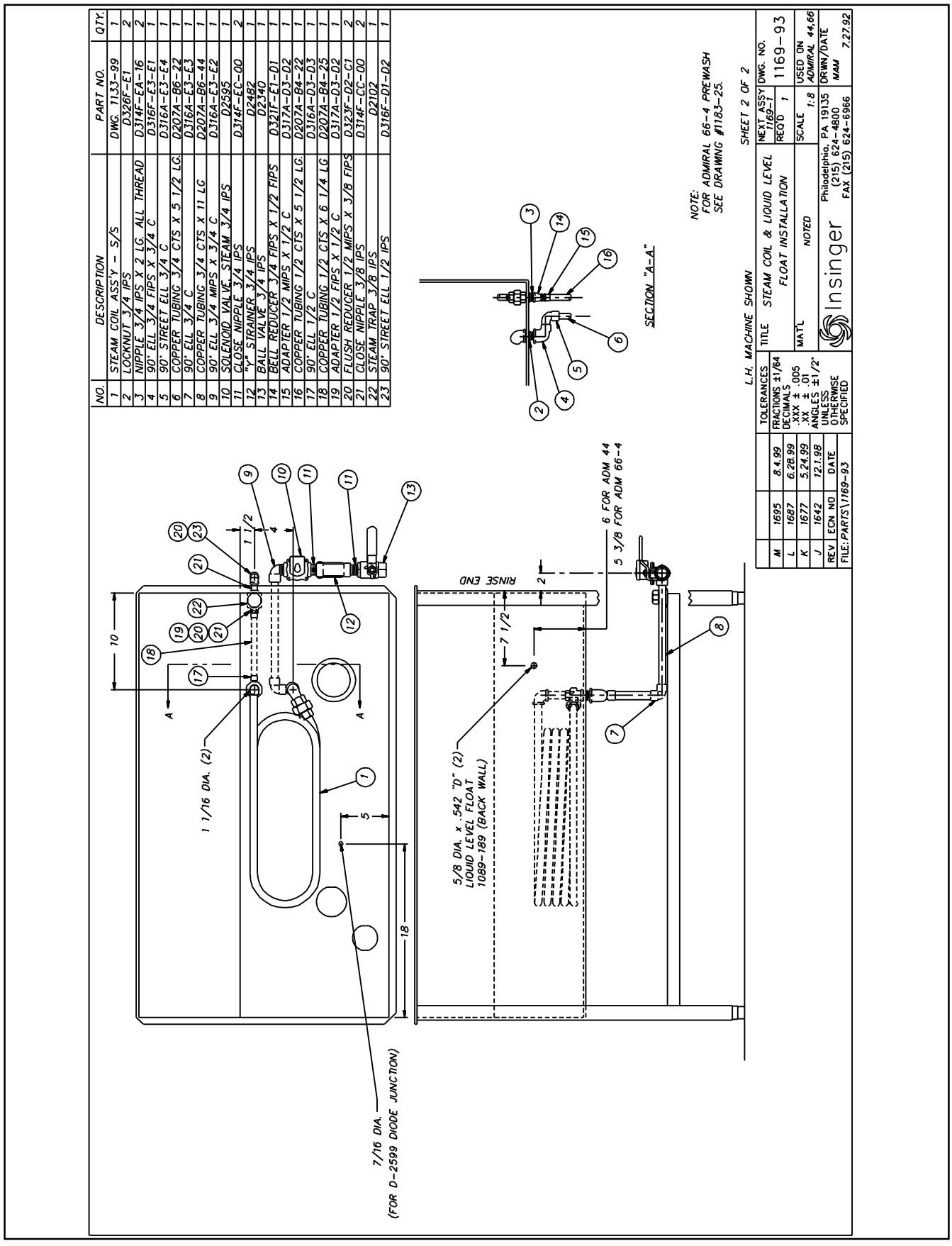
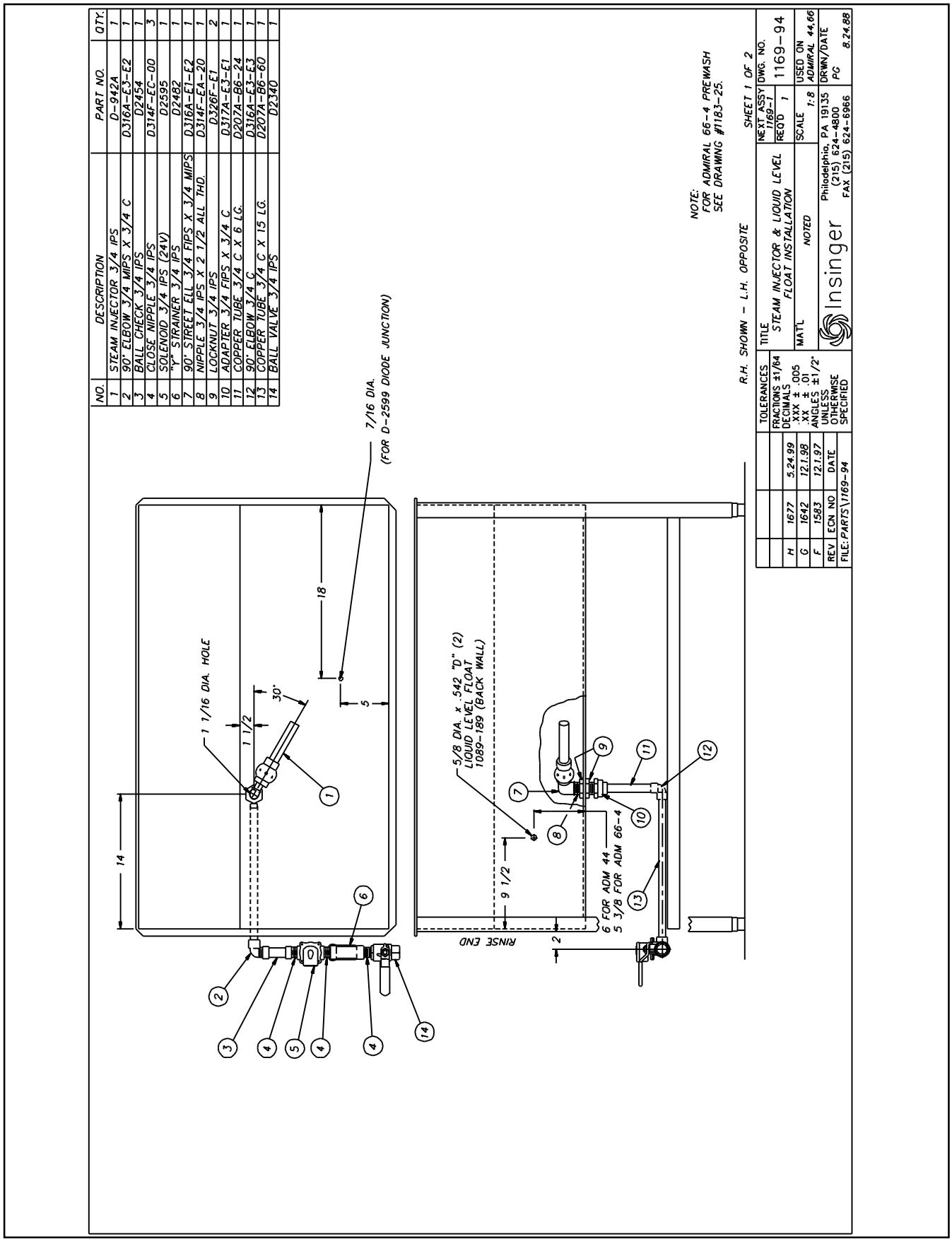
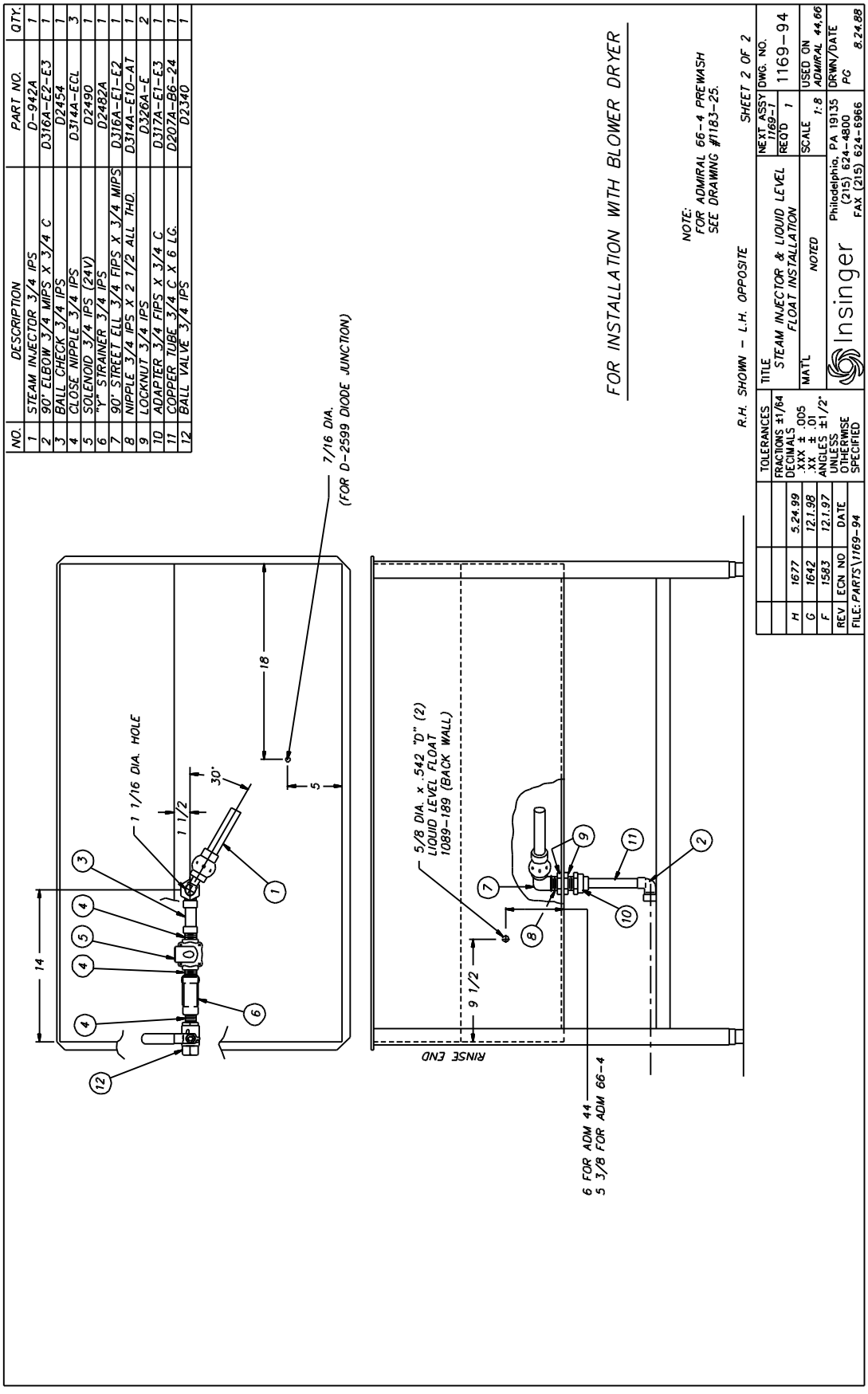
REV	ECN NO	DATE
M	1695	8.4.99
L	1687	6.28.99
K	1677	5.24.99
J	1642	12.1.98

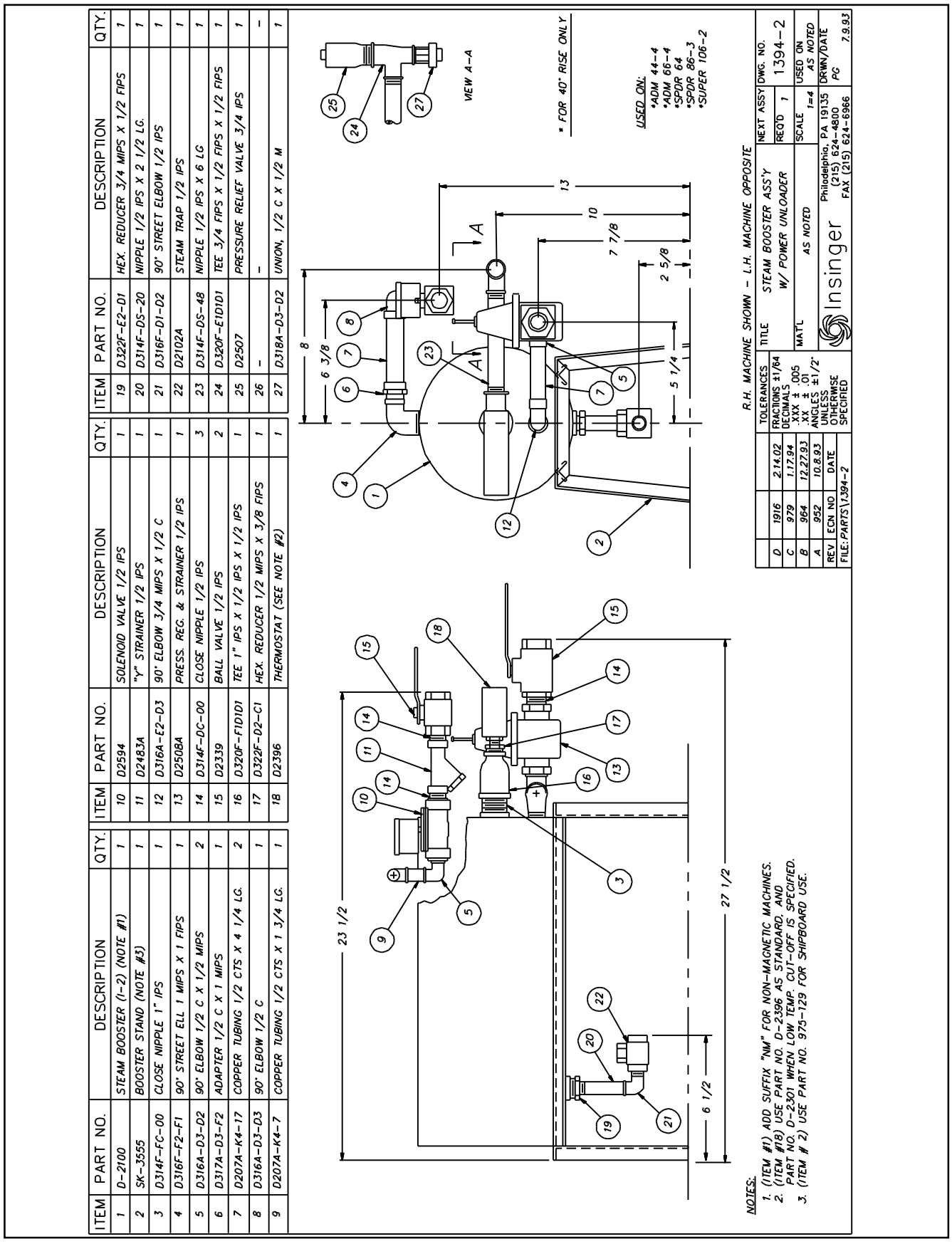
FILE: PARTS\1169-93



NO.	DESCRIPTION	PART NO.	QTY.
1	STEAM COIL ASS'Y - S/S	DWG. 1133-99	1
2	LOCKNUT 3/4 IPS	D326F-E1	2
3	NIPPLE 3/4 IPS X 2 LG. ALL THREAD	D314F-EA-16	2
4	90° ELL 3/4 FIPS X 3/4 C	D316F-E3-E1	1
5	90° STREET ELL 3/4 C	D316A-E3-E4	1
6	COPPER TUBING 3/4 CTS X 5 1/2 LG.	D207A-B6-22	1
7	90° ELL 3/4 C	D316A-E3-E3	1
8	COPPER TUBING 3/4 CTS X 11 LG	D207A-B6-44	1
9	90° ELL 3/4 MIPS X 3/4 C	D316A-E3-E2	1
10	SOLENOID VALVE, STEAM 3/4 IPS	D2595	1
11	CLOSE NIPPLE 3/4 IPS	D314F-EC-00	2
12	"Y" STRAINER 3/4 IPS	D2482	1
13	BALL VALVE 3/4 IPS	D2340	1
14	BELL REDUCER 3/4 FIPS X 1/2 FIPS	D321F-E1-D1	1
15	ADAPTER 1/2 MIPS X 1/2 C	D317A-D3-D2	1
16	COPPER TUBING 1/2 CTS X 5 1/2 LG.	D207A-B4-22	1
17	90° ELL 1/2 C	D316A-D3-D3	1
18	COPPER TUBING 1/2 CTS X 6 1/4 LG	D207A-B4-25	1
19	ADAPTER 1/2 FIPS X 1/2 C	D317A-D3-D2	1
20	FLUSH REDUCER 1/2 MIPS X 3/8 FIPS	D323F-D2-C1	2
21	CLOSE NIPPLE 3/8 IPS	D314F-CC-00	2
22	STEAM TRAP 3/8 IPS	D2102	1
23	90° STREET ELL 1/2 IPS	D316F-D1-D2	1


NO. DESCRIPTION PART NO. QTY.
1 STEAM INJECTOR 3/4 IPS D-942A 1
2 90° ELBOW 3/4 MIPS X 3/4 C D316A-E3-E2 1
3 BALL CHECK 3/4 IPS D2454 1
4 CLOSE NIPPLE 3/4 IPS D314F-EC-00 3
5 SOLENOID 3/4 IPS (24V) D2595 1
6 "Y" STRAINER 3/4 IPS D2482 1
7 90° STREET ELL 3/4 FIPS X 3/4 MIPS D316A-E1-E2 1
8 NIPPLE 3/4 IPS X 2 1/2 ALL THD. D314F-EA-20 1
9 LOCKNUT 3/4 IPS D326F-E1 2
10 ADAPTER 3/4 FIPS X 3/4 C D317A-E3-E1 1
11 COPPER TUBE 3/4 C X 6 LG. D207A-B6-24 1
12 90° ELBOW 3/4 C D316A-E3-E3 1
13 COPPER TUBE 3/4 C X 15 LG. D207A-B6-60 1
14 BALL VALVE 3/4 IPS D2340 1
NOTE: FOR ADMIRAL 66-4 PREWASH SEE DRAWING #1183-25.
R.H. SHOWN - L.H. OPPOSITE
SHEET 1 OF 2
7/16 DIA. (FOR D-2599 DIODE JUNCTION)
1 1/16 DIA. HOLE
1 1/2
30°
18
5
14
5/8 DIA. x .542 "D" (2) LIQUID LEVEL FLOAT 1089-189 (BACK WALL)
9 1/2
6 FOR ADM 44
5 3/8 FOR ADM 66-4
2
RINSE END
TOLERANCES
FRACTIONS ±1/64
DECIMALS
XXX ± .005
XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
STEAM INJECTOR & LIQUID LEVEL FLOAT INSTALLATION
MAT'L NOTED
SCALE 1:8
NEXT ASSY 1169-1
REQ'D 1
DWG. NO. 1169-94
USED ON ADMIRAL 44,66
DRWN/DATE PC 8.24.88
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
H 1677 5.24.99
G 1642 12.1.98
F 1583 12.1.97
REV ECN NO DATE
FILE: PARTS\1169-94


FOR INSTALLATION WITH BLOWER DRYER
R.H. SHOWN - L.H. OPPOSITE
SHEET 2 OF 2
NOTE:
FOR ADMIRAL 66-4 PREWASH
SEE DRAWING #1183-25.
7/16 DIA.
(FOR D-2599 DIODE JUNCTION)
18
5
30°
1 1/16 DIA. HOLE
1 1/2
14
5/8 DIA. x .542 "D" (2)
LIQUID LEVEL FLOAT
1089-189 (BACK WALL)
9 1/2
RINSE END
6 FOR ADM 44
5 3/8 FOR ADM 66-4
NO. DESCRIPTION PART NO. QTY.
1 STEAM INJECTOR 3/4 IPS D-942A 1
2 90° ELBOW 3/4 MIPS X 3/4 C D3164-E2-E3 1
3 BALL CHECK 3/4 IPS D2454 1
4 CLOSE NIPPLE 3/4 IPS D3144-ECL 3
5 SOLENOID 3/4 IPS (24V) D2490 1
6 "Y" STRAINER 3/4 IPS D2482A 1
7 90° STREET ELL 3/4 FIPS X 3/4 MIPS D3164-E1-E2 1
8 NIPPLE 3/4 IPS X 2 1/2 ALL THD. D3144-E10-AT 1
9 LOCKNUT 3/4 IPS D3264-E 2
10 ADAPTER 3/4 FIPS X 3/4 C D3174-E1-E3 1
11 COPPER TUBE 3/4 C X 6 LG. D2074-B6-24 1
12 BALL VALVE 3/4 IPS D2340 1
REV ECN NO DATE
H 1677 5.24.99
G 1642 12.1.98
F 1583 12.1.97
FILE: PARTS\1169-94
TOLERANCES
FRACTIONS ±1/64
DECIMALS
XXX ± .005
XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE
STEAM INJECTOR & LIQUID LEVEL FLOAT INSTALLATION
MAT'L NOTED
NEXT ASSY 1169-1
REQ'D 1
SCALE 1:8
DWG. NO. 1169-94
USED ON ADMIRAL 44,66
DRWN/DATE PC 8.24.88
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966



ITEM	PART NO.	DESCRIPTION	QTY.
1	D-2100	STEAM BOOSTER (1-2) (NOTE #1)	1
2	SK-3555	BOOSTER STAND (NOTE #3)	1
3	D314F-FC-00	CLOSE NIPPLE 1" IPS	1
4	D316F-F2-F1	90° STREET ELL 1 MIPS X 1 FIPS	1
5	D316A-D3-D2	90° ELBOW 1/2 C X 1/2 MIPS	2
6	D317A-D3-F2	ADAPTER 1/2 C X 1 MIPS	1
7	D207A-K4-17	COPPER TUBING 1/2 CTS X 4 1/4 LG.	2
8	D316A-D3-D3	90° ELBOW 1/2 C	1
9	D207A-K4-7	COPPER TUBING 1/2 CTS X 1 3/4 LG.	1
10	D2594	SOLENOID VALVE 1/2 IPS	1
11	D2483A	"Y" STRAINER 1/2 IPS	1
12	D316A-E2-D3	90° ELBOW 3/4 MIPS X 1/2 C	1
13	D2508A	PRESS. REG. & STRAINER 1/2 IPS	1
14	D314F-DC-00	CLOSE NIPPLE 1/2 IPS	3
15	D2339	BALL VALVE 1/2 IPS	2
16	D320F-F1D1D1	TEE 1" IPS X 1/2 IPS X 1/2 IPS	1
17	D322F-D2-C1	HEX. REDUCER 1/2 MIPS X 3/8 FIPS	1
18	D2396	THERMOSTAT (SEE NOTE #2)	1
19	D322F-E2-D1	HEX. REDUCER 3/4 MIPS X 1/2 FIPS	1
20	D314F-DS-20	NIPPLE 1/2 IPS X 2 1/2 LG.	1
21	D316F-D1-D2	90° STREET ELBOW 1/2 IPS	1
22	D2102A	STEAM TRAP 1/2 IPS	1
23	D314F-DS-48	NIPPLE 1/2 IPS X 6 LG	1
24	D320F-E1D1D1	TEE 3/4 FIPS X 1/2 FIPS X 1/2 FIPS	1
25	D2507	PRESSURE RELIEF VALVE 3/4 IPS	1
26	-	-	-
27	D318A-D3-D2	UNION, 1/2 C X 1/2 M	1

NOTES:
1. (ITEM #1) ADD SUFFIX "NM" FOR NON-MAGNETIC MACHINES.
2. (ITEM #18) USE PART NO. D-2396 AS STANDARD, AND PART NO. D-2301 WHEN LOW TEMP. CUT-OFF IS SPECIFIED.
3. (ITEM # 2) USE PART NO. 975-129 FOR SHIPBOARD USE.

R.H. MACHINE SHOWN - L.H. MACHINE OPPOSITE

REV	ECN NO	DATE
D	1916	2.14.02
C	979	1.17.94
B	964	12.27.93
A	952	10.8.93

FILE: PARTS\1394-2

TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS ±1/64, DECIMALS .XXX ± .005, .XX ± .01, ANGLES ±1/2°

TITLE: STEAM BOOSTER ASS'Y W/ POWER UNLOADER

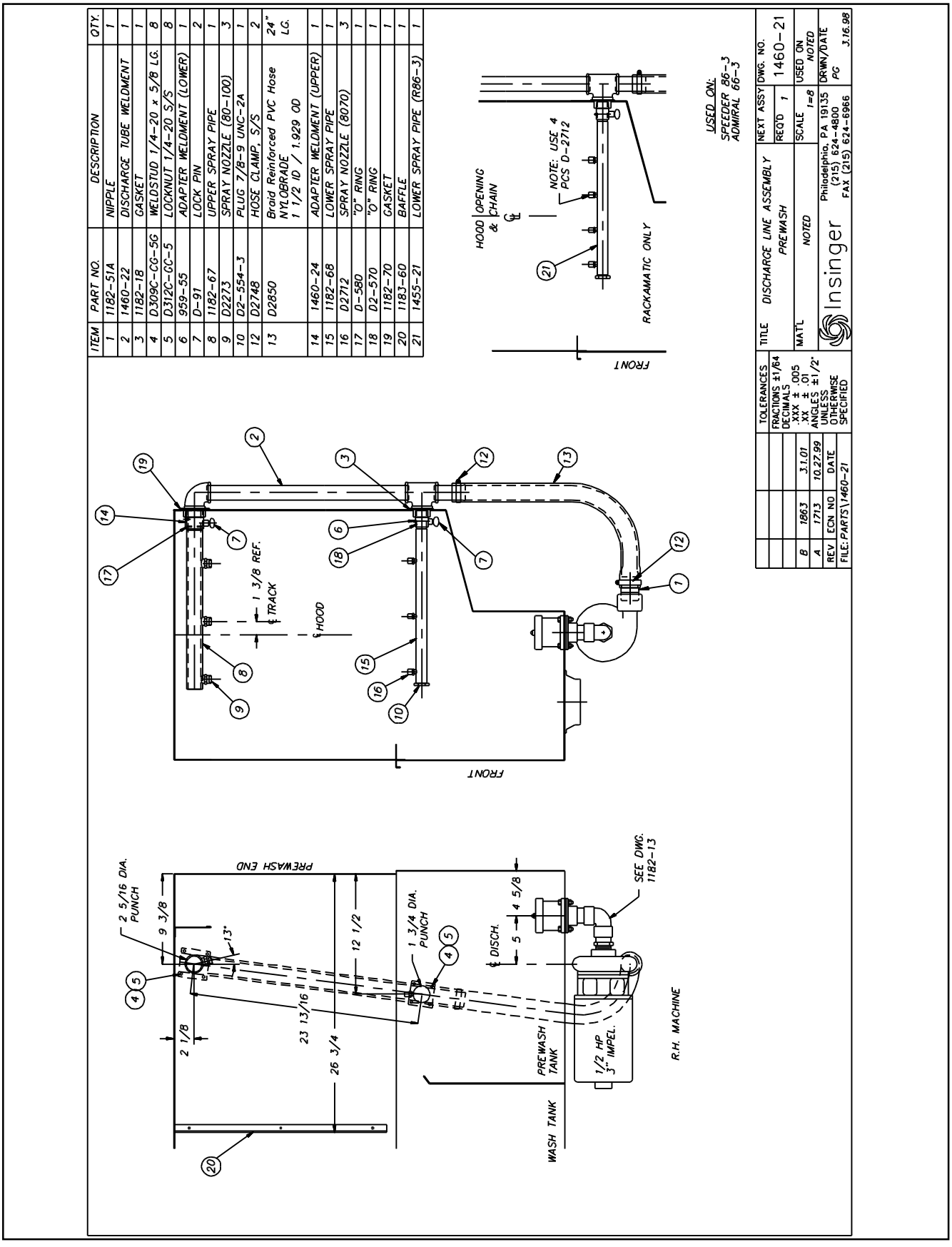
MAT'L: AS NOTED

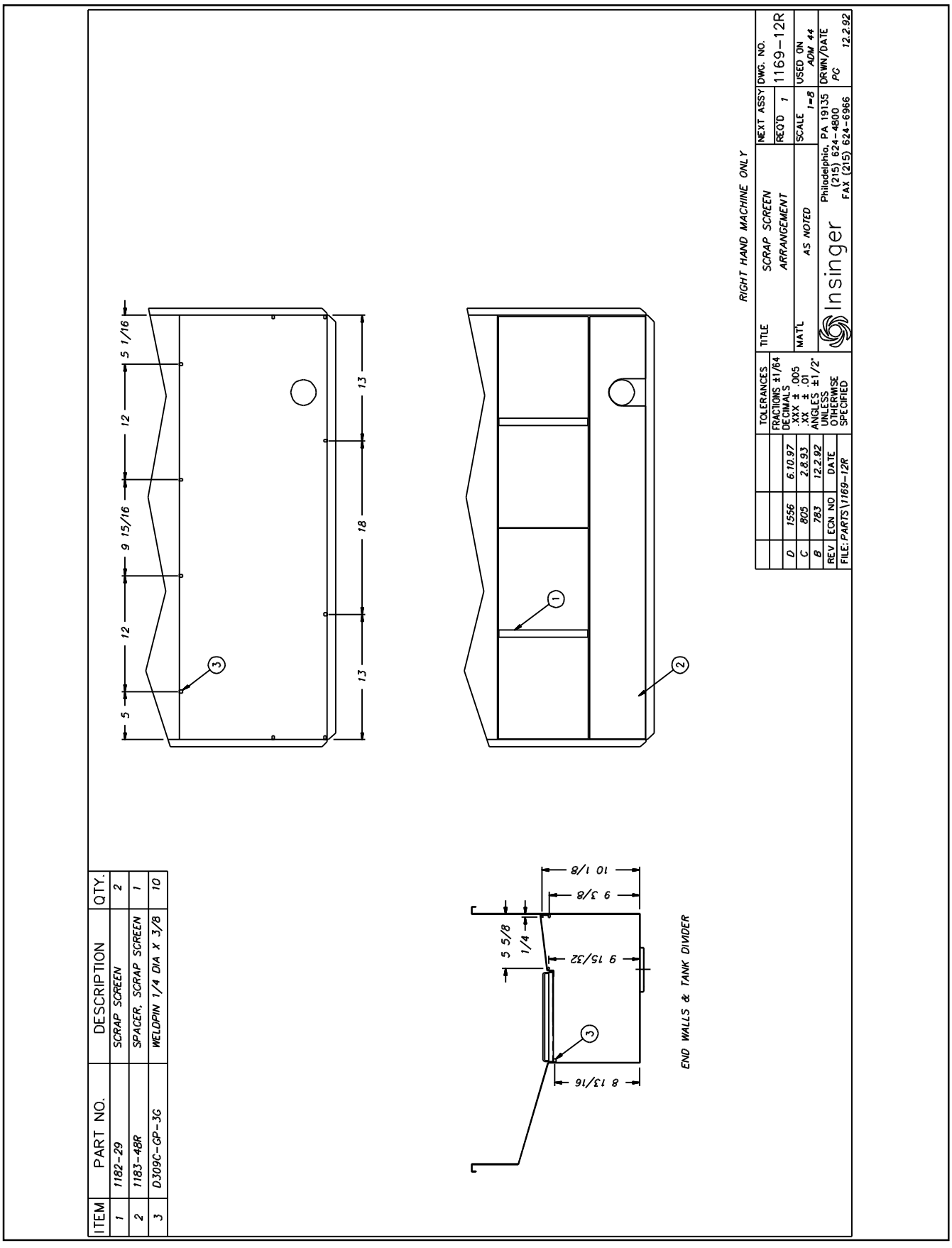
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966

NEXT ASSY | DWG. NO. 1394-2
REQ'D 1 | SCALE 1=4 | USED ON AS NOTED
DRWN/DATE PC 7.9.93

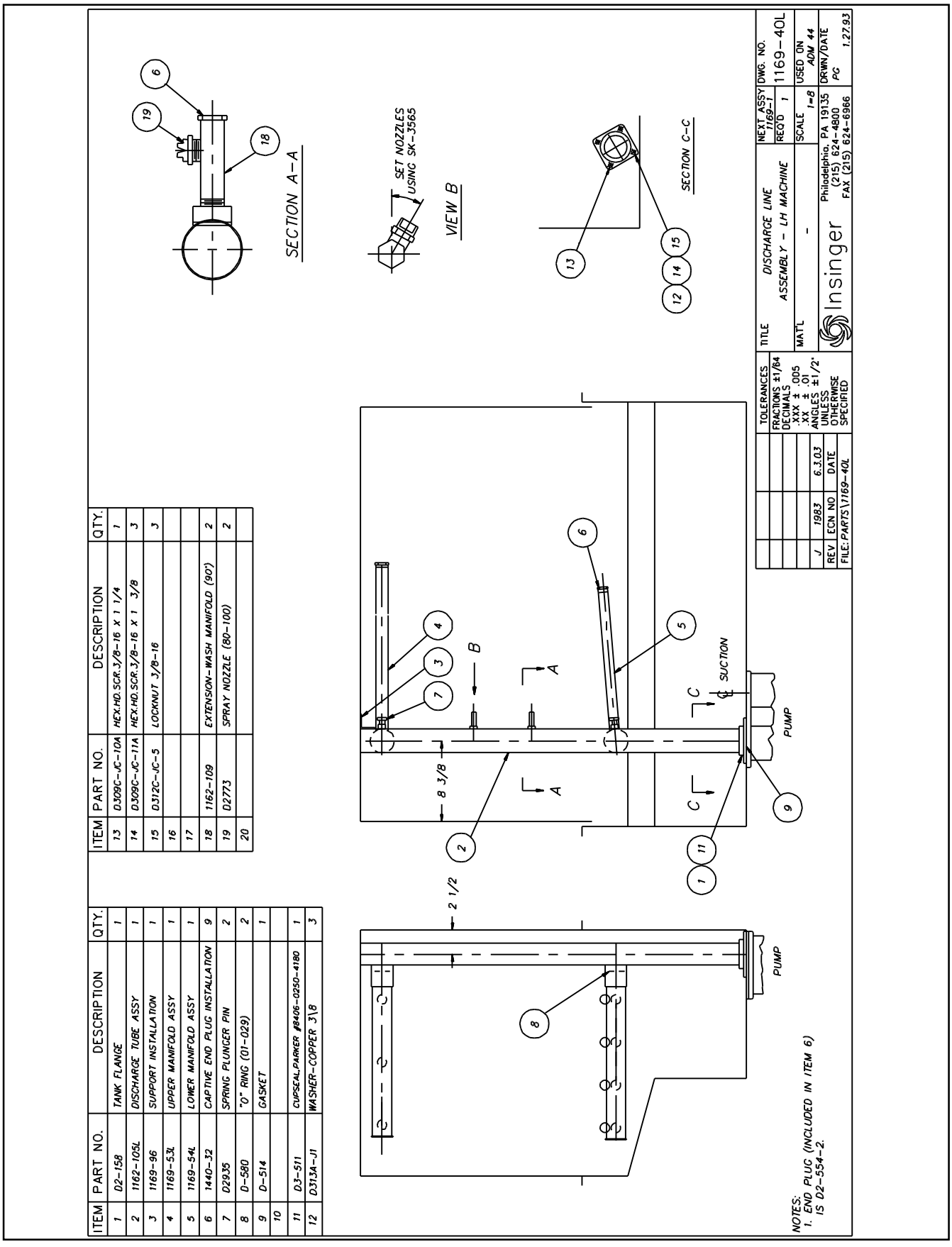
* FOR 40" RISE ONLY

USED ON:
*ADM 44-4
*ADM 66-4
*SPDR 64
*SPDR 86-3
*SUPER 106-2


ITEM | PART NO. | DESCRIPTION | QTY.
1 | 1182-51A | NIPPLE | 1
2 | 1460-22 | DISCHARGE TUBE WELDMENT | 1
3 | 1182-18 | GASKET | 1
4 | D309C-CG-5G | WELDSTUD 1/4-20 x 5/8 LG. | 8
5 | D312C-GC-5 | LOCKNUT 1/4-20 S/S | 8
6 | 959-55 | ADAPTER WELDMENT (LOWER) | 1
7 | D-91 | LOCK PIN | 2
8 | 1182-67 | UPPER SPRAY PIPE | 1
9 | D2273 | SPRAY NOZZLE (80-100) | 3
10 | D2-554-3 | PLUG 7/8-9 UNC-2A | 1
12 | D2748 | HOSE CLAMP, S/S | 2
13 | D2850 | Braid Reinforced PVC Hose NYLOBRADE 1 1/2 ID / 1.929 OD | 24" LG.
14 | 1460-24 | ADAPTER WELDMENT (UPPER) | 1
15 | 1182-68 | LOWER SPRAY PIPE | 1
16 | D2712 | SPRAY NOZZLE (8070) | 3
17 | D-580 | "O" RING | 1
18 | D2-570 | "O" RING | 1
19 | 1182-70 | GASKET | 1
20 | 1183-60 | BAFFLE | 1
21 | 1455-21 | LOWER SPRAY PIPE (R86-3) | 1
HOOD OPENING & CHAIN
NOTE: USE 4 PCS D-2712
RACKAMATIC ONLY
FRONT
USED ON:
SPEEDER 86-3
ADMIRAL 66-3
TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED
TITLE DISCHARGE LINE ASSEMBLY PREWASH
MATL NOTED
Insinger
Philadelphia, PA 19135
(215) 624-4800
FAX (215) 624-6966
NEXT ASSY
REQ'D 1
DWG. NO. 1460-21
SCALE 1=8
USED ON NOTED
DRWN/DATE PG 3.16.98
REV ECN NO DATE
A 1713 10.27.99
B 1863 3.1.01
FILE: PARTS\1460-21
1 3/8 REF.
TRACK
HOOD
FRONT
PREWASH END
2 5/16 DIA. PUNCH
9 3/8
13°
12 1/2
1 3/4 DIA. PUNCH
DISCH.
4 5/8
5
SEE DWG. 1182-13
2 1/8
23 13/16
26 3/4
PREWASH TANK
WASH TANK
1/2 HP 3" IMPEL.
R.H. MACHINE

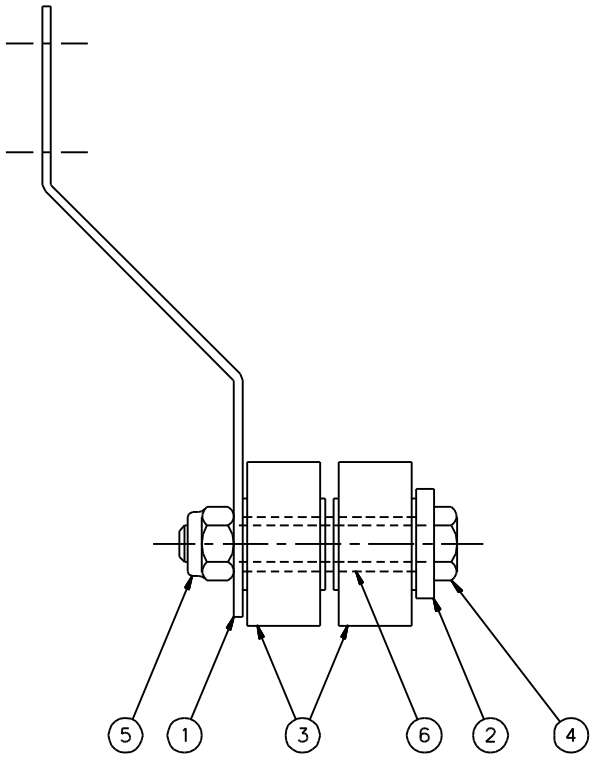


ITEM	PART NO.	DESCRIPTION	QTY.
1	1182-29	SCRAP SCREEN	2
2	1183-48R	SPACER, SCRAP SCREEN	1
3	D309C-GP-3G	WELDPIN 1/4 DIA X 3/8	10



ITEM	PART NO.	DESCRIPTION	QTY.
1	D2–158	TANK FLANGE	1
2	1162–105L	DISCHARGE TUBE ASSY	1
3	1169–96	SUPPORT INSTALLATION	1
4	1169–53L	UPPER MANIFOLD ASSY	1
5	1169–54L	LOWER MANIFOLD ASSY	1
6	1440–32	CAPTIVE END PLUG INSTALLATION	9
7	D2935	SPRING PLUNGER PIN	2
8	D–580	"O" RING (01–029)	2
9	D–514	GASKET	1
10			
11	D3–511	CUPSEAL,PARKER #8406–0250–4180	1
12	D313A–11	WASHER–COPPER 318	3
13	D309C–JC–10A	HEX.HD.SCR.3/8–16 x 1 1/4	1
14	D309C–JC–11A	HEX.HD.SCR.3/8–16 x 1 3/8	3
15	D312C–JC–5	LOCKNUT 3/8–16	3
16			
17			
18	1162–109	EXTENSION–WASH MANIFOLD (90°)	2
19	D2773	SPRAY NOZZLE (80–100)	2
20			

ITEM	PART NO.	DESCRIPTION	QTY
1	1169-26	REAR TRACK	1
2	1169-27	TIE STRIP	1
3	D-582	BELT ROLLER	16
4	D309C-GC-14A	SCREW 1/4-20 x 1 3/4	8
5	D312C-GC-5	LOCKNUT 1/4-20	8
6	1162-50	SPACER	8



REV	ECN NO	DATE

FILE: PARTS\1169-25

TOLERANCES
FRACTIONS ±1/64
DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ±1/2°
UNLESS OTHERWISE SPECIFIED

TITLE: REAR TRACK ASSEMBLY
NEXT ASSY: 1169-23R
REQ'D: NOTED
DWG. NO.: 1169-25
MAT'L: NOTED
SCALE: FULL
USED ON: ADMIRAL 44

Insinger
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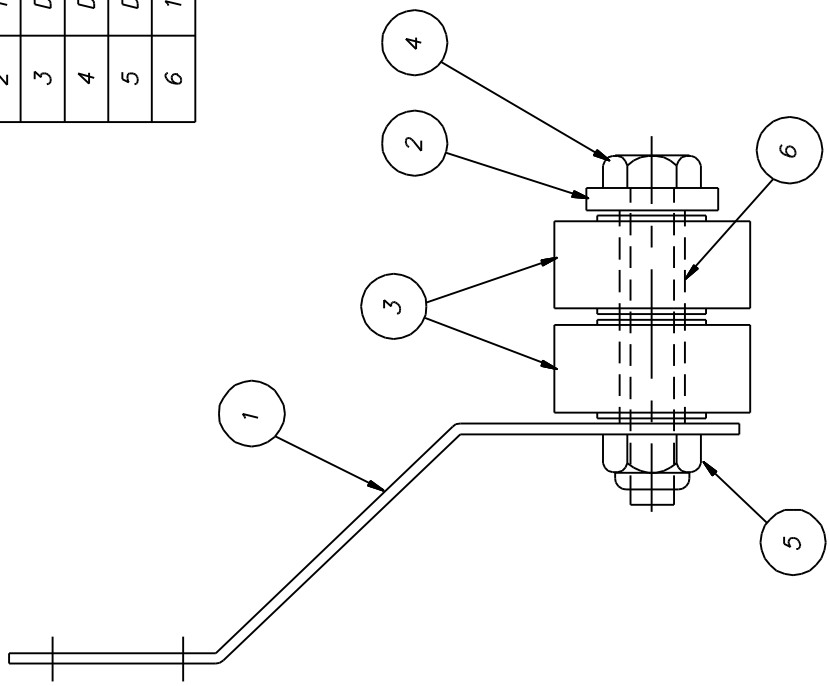
(215) 624-4800
FAX (215) 624-6966

DRWN/DATE: RAF 04.06.87

ITEM	PART NO.	SIZE	DESCRIPTION	QTY.
1	1431-21	B	REAR TRACK	1
2	1431-22	A	TIE STRIP	1
3	D-582	A	BELT ROLLER	24
4	D309C-GC-14A	–	SCREW 1/-20 X 1 3/4 LG.	12
5	D312C-GC-5	–	LOCKNUT 1/4-20	12
6	1162-50	A	SPACER	12



TOLERANCES	TITLE	NEXT ASSY	DWG. NO.
FRACTIONS ±1/64 DECIMALS .XXX ± .005 .XX ± .01 ANGLES ±1/2° UNLESS OTHERWISE SPECIFIED	REAR TRACK ASSEMBLY	REQ'D 1	1183-13
	MAT'L NOTED	SCALE 1=1	USED ON ADM 66-3
REV ECN NO DATE FILE: PARTS\1183-13	Insinger Philadelphia, PA 19135 (215) 624-4800 FAX (215) 624-6966		DRWN/DATE RAF 3.10.88

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Philadelphia, PA 19135-2996
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